

1988-89

Towson State University Academic Calendar

Day, Evening and Extension

(See appropriate schedule bulletin for registration dates, times and information)

Fall Semester 1988

September 6 (Tuesday)	Classes begin
September 6-13 (6 days)	Schedule changes accepted
September 13 (Tuesday)	Last day to withdraw from a first 7-week course
October 7 (Friday)	Last day to withdraw from a full semester course
October 21 (Friday)	Mid-Semester and end of first 7-week course
October 24 (Monday)	Second 7-week classes begin
November 4 (Friday)	Last day to drop second 7-week class
	Preregistration
November 24-25 (Thursday-Friday)	Thanksgiving Holiday — No Classes
November 28 (Monday)	Classes resume
December 9 (Friday)	Last day of classes
December 12 (Monday)	Final examinations begin
December 19 (Monday)	Last day of examinations
January 8 (Sunday)	Commencement

Spring Semester 1989

January 30 (Monday)	Classes begin
January 30-February 6 (6 days)	Schedule changes accepted
February 6 (Monday)	Last day to withdraw from a first 7-week course
March 3 (Friday)	Last day to withdraw from a full semester course
March 17 (Friday)	Mid-Semester and end of first 7-week course
March 20-24 (Monday-Friday)	Mid-Semester Break
March 27 (Monday)	Second 7-week classes begin
April 3 (Monday)	Last day to drop second 7-week class
May 11 (Thursday)	Last day of classes
May 12 (Friday)	Final examinations begin
May 19 (Friday)	Last day of examinations and semester
May 21 (Sunday)	Commencement

January Session 1989

January 3 (Tuesday)	Classes begin
January 16 (Monday)	Dr. King's Birthday — No classes
January 24 (Tuesday)	Classes end

INCLEMENT WEATHER POLICY

In the event of inclement weather, announcements about schedule changes or cancellations will be broadcast over all major radio stations including WBAL, WFBR, WBSB and the Towson State University FM station, WCVT (FM 89.7).

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Policies, requirements and procedures included in this catalog may be changed from time to time in accordance with established procedures. The catalog is published as an information resource and is not to be considered a binding contract between the student and Towson State University.



Dr. Hoke L. Smith, president

The University

HISTORY

Towson State University traces its history to 1865. At that time the General Assembly of Maryland established a statewide public school system and authorized the first state teacher training institution: The Maryland State Normal School, later known as the State Teachers College at Towson, then in 1963 as Towson State College, and since July 1, 1976 as Towson State University.

Formally opened in Baltimore on January 15, 1866, the school was the only institution devoted exclusively to the preparation of teachers for the public schools of Maryland. It occupied four different locations in the city of Baltimore before moving to its present suburban location in 1915.

In 1946 the arts and sciences program was introduced. Beginning as a two-year transfer program, it was extended to a four-year, degree-granting program in 1960.

A graduate program for elementary school teachers leading to the Masters of Education degree was inaugurated in 1958.

In 1963 the university was authorized, by action of the Legislature, to expand its offering in the arts and sciences while maintaining a strong program in teacher education and to change its name to Towson State College.

In 1965 the university began expansion of its graduate program to include offerings for guidance counselors and secondary school teachers.

In 1966 the university completed 100 years of service to the state, having graduated more than 12,000 students during its first century. In 1982 the university began offering the Bachelor of Fine Arts degree in addition to its Bachelor of Arts and Bachelors of Science degrees. Towson State has now graduated 55,122 students, 5,667 of them having received advanced degrees.

Located in one of the fastest growing areas of Baltimore County, the university, in 1987-1988, enrolled 10,006 full-time undergraduates, 4,384 part-time undergraduates, and 1,152 graduate students. Development plans suggest that the university stabilize its full-time enrollment at 9,000, achieving a practical balance among resources, facilities and students.

MISSION

Towson State University is committed to providing comprehensive opportunities for undergraduate and graduate education and offers a variety of programs in the traditional arts and sciences and in specialized professional fields.

The curricula, services, and activities of the university are shaped by two primary goals: That all students encounter the values and methods that establish a liberal education, promote critical thought, and develop mental habits required for thoughtful citizenship; and that all students, in completing undergraduate or graduate majors, have the opportunity to gain the knowledge and skills essential to their career choices.

The university emphasizes excellent teaching, scholarship, and creativity, with students and faculty directly contributing to the intellectual and cultural life of all the communities it serves.

College of Continuing Studies

The College of Continuing Studies at Towson State University provides degree and non-degree seeking students with the opportunity to pursue, part-time and full-time, a liberal education in the arts and sciences and in professional fields.

Courses that satisfy degree requirements are offered, during the day as well as evening, to students who do not attend the university on a full-time, weekday basis. Additionally, complete degree programs in many areas of study are administered through the Evening Program, the Summer Program, and the Weekend

Program on the university campus, and in community settings. The College also offers comprehensive academic advisement for all Continuing Studies students.

Non-traditional learning formats, such as directed independent study and television courses, are provided for students who may require more autonomous learning than the typical classroom course permits. Additionally, students may be evaluated on prior learning through life experience and receive university credit. Lifelong learning opportunities, such as the Elderhostel and Informal course programs, fulfill a significant function of Continuing Studies by meeting the personal and intellectual needs and interests of the community. These learning opportunities emphasize scholarship and creativity for the adult learner and promote lifelong learning.

Graduate School

The Graduate School is committed to excellence in post-baccalaureate education in order to meet the needs of both degree and non-degree students. The resources of the Graduate School are available to students whose goals are directed toward advanced study, career advancement, professional leadership, or preparation for further graduate study.

The primary responsibility of the Graduate School is to provide an intellectually stimulating environment for faculty and students to achieve their educational objectives. Graduate faculty and students share responsibility for the scholarship and creativity underlying the Graduate School, its curricula, research, and academic excellence.

College of Allied Health Sciences and Physical Education

The College of Allied Health Sciences and Physical Education, committed to providing comprehensive educational opportunities to undergraduate and graduate students, offers programs in five departments, all with a common bond of preparing students to provide human services designed to improve the quality of life.

The curricula, services, and activities of the College are shaped by three goals: that all undergraduate and graduate majors encounter the values and methods to provide them with rigorous grounding in a liberal education; that these students gain knowledge and skills essential to their autonomous functions through didactic and applied experience; and that students encounter opportunities to grow as skilled and responsible professionals in human services.

The College of Allied Health Sciences and Physical Education encourages scholarship and creativity and contributes to the overall well being of the communities with which faculty and students interact.

College of Education

A liberal education is the foundation of professional knowledge and skills for undergraduate and graduate students in the College of Education. All students in the College receive extensive education in the liberal arts as well as a thorough background in their respective major.

Students in the College are taught to recognize individual differences and to respect diverse backgrounds; the goal is to enable our graduates to work effectively with all learners. Scholarship and research enable students in the College to relate current theory to professional practice. The faculty of the College of Education is committed to methods of teaching, as well as research skills, which prepare individuals for careers in all fields where these skills are needed. Programs within the College equip students to become certified as classroom teachers and to qualify for a variety of other careers in education, in both public and private sectors.

College of Fine Arts and Communication

The College of Fine Arts and Communication supports the objectives of the University by offering courses of study designed to enhance students' experiences in the traditional arts and sciences. Students are introduced to the intellectual and aesthetic traditions of world cultures and are encouraged to develop the ability to make judgments and to support them with coherent discourse.

Additionally, the College of Fine Arts and Communication offers professional major programs at both undergraduate and graduate levels. These programs are structured so as to permit in-depth study of all disciplines represented in the College and thus give students the opportunity to excel in the disciplines they choose.

Through the creative activities of its faculty and students, the College of Fine Arts and Communication is committed to the cultural enrichment of university life and that of the community at large by offering art exhibits, dance and theatre productions, forensics presentations, recitals and concerts, films, radio and television productions, and guest artists and lectures.

College of Liberal Arts

The College of Liberal Arts of Towson State University is committed to providing comprehensive opportunities for undergraduate and graduate instruction in the humanities and social sciences. The liberal arts curriculum helps students develop the ability to analyze and interpret information and opinions objectively, form and express conclusions creatively, express themselves clearly, appreciate the rich diversity of human culture, and move comfortably in the world of ideas and values. Degree programs in the College of Liberal Arts emphasize professional career opportunities as well as more traditional theoretical aspects of the disciplines.

Through its contribution to the university's core curriculum, the College of Liberal Arts contributes to the university's achievement of its goal of a truly liberal education for all students. Through its emphasis on professional career preparation in the majors, the College of Liberal Arts meets the university's goal of providing students with the opportunity to gain the knowledge and skills essential for future careers.

The College of Liberal Arts emphasizes excellent teaching, scholarship and creativity. Its students and faculty contribute actively to the intellectual and cultural life of all the communities it serves.

College of Natural and Mathematical Sciences

The sciences and mathematics are an integral part of the comprehensive educational program of Towson State University. The mission of the College of Natural and Mathematical Sciences is, therefore, two-fold: to offer a thorough grounding in the basic principles of mathematics and science for those who wish to acquire an extensive knowledge of the area and to provide, for the student body as a whole, a necessary dimension in their educational development.

The goals of the College are realized, primarily, by an emphasis on excellence in teaching. In addition, because science and mathematics continue to develop through the dynamic interaction between theory and experience, the College encourages, of both faculty and students, experimental and theoretical research, other forms of scholarly activity, and intellectual service to the community.

School of Business and Economics

The School of Business and Economics provides a broad range of professional experiences for students committed to careers in accounting, business administration, and economics. In achieving its objectives, the School complements the University's liberal arts tradition and its emphasis on undergraduate instruction, research

and regional service. The School, through its departments, provides a theoretical basis and practical activities in its disciplines.

The School achieves its objective of overall academic excellence primarily through qualified faculty and staff, high academic standards, effective curriculum and extra-curricular activities. The School aims to prepare students for responsible citizenship and leadership roles for business and society. Faculty members are encouraged to emphasize excellence in teaching, scholarship and creativity through research, publications and professional activities.

GOALS

To achieve its philosophy and mission, the university has adopted the following goals as fundamental concepts for planning and development:

- I. By far the highest priority of the university shall be to provide a sound liberal arts and sciences education for all students, regardless of their major or occupational ambitions.
- II. The campus environment shall provide ideal conditions for learning—learning between student and teacher, student and student, teacher and teacher, and between these and the staff, alumni, and citizens concerned with intellectual and professional pursuits.
- III. The university shall support programs leading to the development of skills and knowledge useful in future employment.
- IV. Excellence in student, faculty, and administrative performance shall be encouraged by relevant, constructive evaluation and recognition.
- V. The university shall provide equal educational opportunity for the population it serves.
- VI. The university shall maintain its autonomy from unreasonable influence by outside governing bodies and special interest groups.

A full statement of particular guidelines for meeting each goal is presented in Appendix A.

GOVERNANCE

Board of Trustees

The university is governed by a 15-member Board of Trustees—14 members appointed by the Governor for nine-year terms, and a student member appointed by the Governor for a one-year term. This Board also governs the five other state colleges and universities.

Administration

All programs of the university are maintained under the direct authority of the president and by authority delegated to the provost and to the vice-presidents for student services, institutional advancement, and business and finance.

University Senate

Committed to the principles of shared governance and democratic process, the university has established a senate as its chief legislative body. Internal policies and procedures are developed by the senate and its committees. Voting members of the University Senate include 18 elected faculty members, the President of the Faculty Association, and 6 student members, including the Student Government Association President. The University President and Vice Presidents are also members of the University Senate.

COLLEGES AND SCHOOLS

The university is comprised of eight colleges and schools: The College of Allied Health Sciences and Physical Education, The

College of Education, The College of Fine Arts and Communication, The College of Liberal Arts, The College of Natural and Mathematical Sciences, The School of Business and Economics, The College of Continuing Studies, The Graduate School.

Each of the first six of these colleges and schools is formed by a grouping of related disciplines, administered by an academic dean, and governed by a council whose membership includes the dean, elected faculty, and appointed students. The councils establish policies and procedures governing the programs of the academic departments they represent. Once a student has determined a program of study, he or she becomes a member of and graduates from the college or school administering the program.

The College of Continuing Studies and The Graduate School are administrative divisions, each supervised by a dean and governed by the University Senate.

Student Government Association

The Student Government Association is the student governmental body authorized by the administration of the university. The SGA consists of an executive branch, composed of a president, vice president and treasurer, and a legislative body called the Senate, composed of fourteen students elected at large and one student appointed from the freshman class. Policies and procedures affecting students and student-run organizations are developed by the SGA Senate and its committees.

The SGA also coordinates student representation in the university governance structure including the University Senate and its respective committees.

ACCREDITATION

Towson State University is accredited by the Middle States Association of Colleges and Secondary Schools, the Maryland State Board of Education, the National Association of Schools of Music, the National Association of Schools of Dance, the National Council for the Accreditation of Teacher Education, the National League for Nursing, the American Occupational Therapy Association, the American Medical Association, and the American Chemical Society.

The University is a member of the American Council on Education, The American Association of State Colleges and Universities and The Association of American Colleges.

FACULTY

The faculty of the university consists of approximately 500 instructors, the greater number of whom have earned doctorates or hold the highest degree of academic preparation expected for their fields of expertise. Dedicated to effective classroom instruction and attention to student needs, the faculty also has distinguished itself through research and publication.

PRIVACY RIGHTS OF PARENTS AND STUDENTS

Towson State University is in compliance with Section 513 (Protection of rights and privacy of parents and students) and Section 514 (Protection of pupil rights) of Title V—Education Administration of the Education Amendments of 1974.

All student records, including grades, financial data, and personal information—addresses, class schedules, telephone numbers—are confidential. Only in cases of dire medical emergency will students, either on or off campus, be contacted for the relay of messages. A complete description may be found in Appendix D.

NON-DISCRIMINATION IN EDUCATION AND EMPLOYMENT

Towson State University is in compliance with Titles VI and VII of the Civil Rights Act of 1964, the Equal Pay Act of 1963, Title IX

of the Education Amendments of 1972, Titles VII and VIII of the Public Health Service Act, Executive Order 11246/11375, section 504 of the Rehabilitation Act of 1973, and section 303 of the Age Discrimination Act of 1975, Pregnancy Discrimination Act of 1978, EEOC guidelines on sexual harassment of 1980 and Articles 64A and 49B of the Annotated Code of Maryland. In accordance with these laws, the university does not discriminate against any individual for reasons of race, color, religion, national origin, sex, age, condition of handicap, political affiliation, marital status, or other irrelevant criteria in the admission of students, educational programs and activities, hiring of faculty and staff, or any terms and conditions of employment. The university is also in compliance with federal regulations regarding veteran status. Information on these laws and copies of the Affirmative Action Plan of Towson State University are available from the Affirmative Action Officer.

THE CAMPUS AND FACILITIES

The university is situated on a campus of 326 acres located a mile and one-half beyond the northern border of the city of Baltimore on beautifully rolling wooded grounds.

Within an eight-mile radius of the campus are all the cultural advantages of the city of Baltimore—the Peabody Conservatory of Music and Library, the Enoch Pratt Free Library, the Walters Art Gallery, the Baltimore Museum of Art, and the many theatres and other cultural centers necessary for a well-rounded college experience. University facilities include 13 academic buildings, 10 residence halls, a University Union, and five auxiliary structures. A complete description of these and their specific functions is presented in Appendix B.

Undergraduate Admissions

Administration Building, Second Floor. (301) 321-2112 (local number) 1-800-492-4723 (toll-free in continental U.S.).

Hours: Monday through Friday 8:30 a.m. to 5:00 p.m.

Saturday 8:30 a.m. to 12 Noon (during the regular semesters)

Linda J. Collins, *Director*

Frederick A. Bianco, *Associate Director (Transfers)*

Angel D. Jackson, *Associate Director (Freshman)*

Stephanie T. Fowler, *Senior Assistant Director*

Jeffrey M. Haas, *Senior Assistant Director*

Keith L. Mariner, *Assistant Director*

Martha Grimm, *Transfer Evaluator*

WHEN TO APPLY

Admission to Towson State University is granted to applicants whose academic and personal qualifications give promise of academic success. The university reserves the right to close admissions when no space remains.

Students seeking freshman admission should file applications during the first semester of the senior year.

Students seeking transfer admission should file as early as October 1 for the upcoming spring and fall semesters. The deadline for the receipt of applications and credentials is December 1 for the spring semester and March 1 for the Fall. Spring admission is *limited*, with priority given to graduates of Maryland community colleges.

Any application received after the priority deadline is processed with the distinct possibility of exhausted space in the class and/or limited academic services, i.e., advising, financial aid, and housing.

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Persons who have been denied admission to Towson State University will not be permitted to attend as non-degree students. They may, however, transfer to the university if they meet transfer admission requirements after attending another college or university. Persons who graduated from high school within the last three (3) years must formally apply for admission in order to attend the University.

ADMISSIONS PROCEDURE

1. An applicant for full-time day admission may receive application materials from the guidance office of the secondary school, the counseling office of the junior/community college, or from the admissions office of the university.
2. The applicant should complete Form I and return it with a non-refundable application fee of \$25 (check or money order) to the Admissions Office. Each applicant is responsible for the Admissions Office's receipt of his or her official high school transcript, including mid-year and final grades with verification of graduation as each becomes available, together with a completed transcript supplement (application Form II), *which must be received directly from the student's high school*. The transfer applicant should arrange to have forwarded official transcripts of all college work attempted or completed, whether or not credit was earned, from all institutions attended.
3. The standardized test required for admission is the Scholastic Aptitude Test of the College Entrance Examination Board. All freshman applicants and transfer students with fewer than 25 completed college-level credit hours must arrange to have the results of this test sent to the Director of Admissions. Students should take the test in the junior or senior year of high school. Towson State University's College Board identification code number is 5404.
4. Incomplete applications are subject to cancellation. Approved applications which remain incomplete for lack of final high school or college transcripts are subject to revocation. The applications of admitted students who do not enroll for the given semester are cancelled.

ADMISSIONS POLICY

A complete statement of the admissions policy instituted by the Board of Trustees is presented as Appendix C. Applicants should thoroughly review Appendix C in addition to the information presented below.

GUIDELINES FOR FRESHMAN ADMISSION

Applicants for Fall, 1989 freshman admission will be admitted to the university based on the following guidelines and timetables:

Completed application materials and supportive documentation (official transcripts and SAT results) must be received by March 1.

Preferred admission will be granted beginning October 1 for those freshman applicants whose secondary school records indicate overall "B" (3.0 or above) level work in academic courses from grades 9-11 and whose minimum SAT verbal and math scores are each at least 500.

Priority admission will be granted beginning December 1 for those applicants who possess a "B-" (2.75 or above) academic grade point average, which may include senior mid-year grades, and whose minimum SAT verbal and math scores are each at least 470.

Regular admission will be granted beginning February 1 for applicants who possess a "C+" (2.50 or above) academic grade point average, including mid-year senior grades, and whose SAT verbal and math scores are each at least 450. Students whose comprehensive academic average reflects "C+" level work, but whose

SAT scores fall between 400 and 450, may have their applications evaluated under probability success guidelines, incorporating the computational aid. Students whose records indicate the probability of a 2.00 collegiate average or higher (determined by adding the weighted factors for high school average, SAT verbal and SAT math scores) may also be considered for admission, if space permits, *during this time only*. Admission will not be granted to any freshman whose high school average is below the 2.00 ("C") level, or whose SAT scores (either verbal or math) are below 350, without special exception.

Any exceptions to these policies can be considered only under extraordinary conditions.

For Spring, 1989 admission, first-time freshman applicants with no previous college attendance will be admitted to the university based on *regular admission guidelines*, as described and outlined above. These applications will be considered on a space available basis. Applications and all supportive documentation must be received in official form by December 1st.

For Fall 1989, successful candidates will also be expected to have completed four (Carnegie) units of English (including one each of composition, English literature, and American literature), three units of social sciences (U.S. History, American National Government, and World Civilization), two units of science (biology and another laboratory-based science), and three units of mathematics (Algebra I, Algebra II, and Geometry), and eight (8) elective units. Any successful applicant whose high school transcript does not include this combination of curriculum requirements can be admitted with the understanding that deficiencies will be completed during the *first semester* of the freshman year at Towson. Students who are admitted under this condition and who fail to complete the stipulated courses within the *first semester* will have their degree candidacy withdrawn. In general, students will not receive graduation credit for this work, which is offered during *daytime hours* only.

COMPUTATIONAL AID

To compute your predicted Towson State University GPA:

multiply your		times	this number	=
High school average	_____	×	.7382	=
Verbal SAT	_____	×	.0007	=
Math SAT	_____	×	.0012	=
			Subtotal	_____
			Subtract	-.7012
			Your predicted TSU GPA	_____

GUIDELINES FOR TRANSFER ADMISSION

To be considered as a transfer applicant, a student must have completed a minimum of 25 semester hours of college-level work at the time of application. College-level work may not include remedial or preparatory courses or non-traditional course work, such as Credit for Prior Experience/Learning, Military Science, the College Level Examination Program (CLEP), D.A.N.T.E.S., U.S.A.F.I., A.C.E. evaluations, etc.

The requirements for transfer admission vary depending upon the number of credit hours completed by the applicant. Those who have completed less than 25 credit hours of college-level work at the time of transfer can be considered for admission if they possess at least a 2.50 cumulative grade point average for all college-level work completed and are in good academic standing. In

addition, a transfer applicant with less than 25 credit hours must possess at least a 2.00 predicted collegiate average, incorporating the computational aid as described in the Freshman Admission section above.

Applicants who have completed between 25 and 55 college-level credit hours at the time of transfer can be considered for admission if they possess a 2.25 cumulative collegiate grade point average and are in good academic standing. A 2.00 cumulative grade point average and good academic standing are required for those applicants who have completed 56 or more college-level credit hours at the time of transfer. Applicants who have attended multiple institutions will have their records evaluated on an individual basis.

Admissions priority will be granted to graduates of Maryland community and junior colleges and to those community college students who have earned at least 56 credits but have not earned an Associate of Arts degree. Maryland resident transfer students who have attended two or more institutions may be considered for transfer admission based on all course work completed, as long they possess a combined GPA which corresponds to the transfer requirements listed above and are in good academic standing.

Any transfer applicant who has attended Towson's College of Continuing Studies as a non-degree student must possess at least a 2.00 grade point average for all course work attempted through that College, even if the applicant is admissible based on course work subsequently completed at other institutions. Students who apply for transfer admission based on their non-degree attendance through the College of Continuing Studies must also possess the appropriate grade point average relative to the number of credit hours completed.

Evaluation of Transfer Credits

The advanced standing granted to students transferring from other colleges and universities is determined through an official evaluation by the university. The student must clearly understand that this evaluation will be final, and acceptance of an offer of admission signifies acceptance that the university will determine the student's advanced standing. Students admitted with advanced standing are, in general, given credit for college-level courses completed with better than the minimum passing grade elsewhere, insofar as such courses correspond in content and quality to subjects required for the degree sought at Towson State University.

The letter of admission for a transfer applicant includes the estimated number of credits transferable to Towson State. Once the student accepts the university's offer of admission (by returning the Enrollment Contract and fee), he/she will receive an official evaluation of transferable credits from the Admissions Office. This evaluation is usually (but not always) preliminary in nature, as the student is usually taking additional courses at the time of admission. A final evaluation of credit will be prepared once the final grades for the most current semester are received in official transcript form from the student's former college or university. The appropriate cumulative average, as determined by the number of credits completed, and good academic standing must be maintained, however, or the university's offer of admission will be withdrawn. Failure to forward an official, final transcript before the beginning of the semester will also result in the revocation of admission and degree standing.

Upon receipt of a final evaluation, the transfer student should review its contents carefully. If the student has any questions or feels there is an error, the Admissions Office *must be advised within 30 days*. In no case will changes, additions, or corrections be made to the evaluation after the student has completed the first semester in residence at Towson State University.

Any student admitted to degree candidacy as a transfer student must maintain the appropriate cumulative average and remain in good academic standing through the most recent semester in atten-

dance at his or her previous institution. Failure to meet this requirement will result in the cancellation of the university's original offer of admission and in the forfeiture of all related fees and privileges.

General University Requirements for Transfer Students

Students transferring to the university may or may not need to complete course work satisfying General University Requirements. In planning application, transfer students should carefully examine the statement of General University Requirements and of alternate requirements for junior year transfer outlined in the university curriculum section of this *Catalog*.

COMPETENCY REQUIREMENTS FOR ENTERING STUDENTS

The Office of Developmental Programs administers the competency testing and developmental studies programs in accordance with the admissions policy of the Board of Trustees of the State Universities and Colleges. The policy requires that all entering students demonstrate competence in the basic skills of reading, writing, and mathematics. Competence in basic skills is initially assessed by performance on the New Jersey College Basic Skills Placement Tests.

All matriculating freshmen and all transfer students with fewer than 25 credits will be administered diagnostic placement tests.*

Students not attaining the required minimum scores on the standardized tests will be enrolled in developmental studies courses in the basic skills. These courses will not count toward the 120 credits required for graduation. Students must complete these courses with grades of "S," "C" or higher and achieve the university's minimum proficiency level prior to their third regular semester in order to continue attending the institution as degree candidates. *Students who do not achieve minimum proficiency prior to the third regular semester or who fail to achieve a grade of "S" or "C" or higher will have their degree candidacy withdrawn.*

Students who have had their degree candidacy withdrawn because they did not achieve minimum proficiency prior to the third regular semester may enroll as special non-degree students and may take only developmental courses. Students who fail to successfully complete developmental course(s) on the third attempt may no longer attend the university in pursuit of a degree. Once competency requirements are met, students may petition the Academic Standards Committee for reinstatement to degree candidacy.

Some students, whose writing competency test scores indicate specific weaknesses but do not warrant placement into developmental writing coursework, may be required to receive a prescribed tutorial experience during the semester in which they take College Writing (ENGL.102). Such students must complete this experience *before* they reach junior standing.

*The following students are exempt from the competency testing program:

1. Transfer students with 25 or more transfer credits.
2. Freshmen with SAT verbal scores of 470 or above (exempt from the reading and writing test) and/or SAT math scores of 470 or above (exempt from the math test).

NON-NATIVE SPEAKER PLACEMENT TEST

All entering students for whom English is not the native language are required to take a placement test administered by the English Language Center prior to registration. Based on the results of this test, students may be placed in an appropriate level of English as a Second Language (DVWR) and must complete the required sequence before registering for any English (ENGL) courses. If appropriate, students must begin remedial courses upon entering the university. Students who fail to complete these requirements

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(DVWR 105 and 106) prior to the third semester will have their degree candidacy withdrawn. These courses *will* count toward the 120 credits required for graduation.

If test scores indicate high proficiency, students will be placed in the more advanced courses. Transfer students are also required to take the proficiency test and may be required to take English as a Second Language courses even if they have already satisfied the College Writing (ENGL.102) requirement.

INTERNATIONAL STUDENT APPLICATION

Requests for information or admission materials should be made far enough in advance to allow processing before deadline dates set by the university.

International applicants who are accepted for admission usually begin studies in the Fall semester (early September) or the Spring semester (late January). Applicants who are admitted for the Fall semester may begin course work during the Summer (June) session. The deadline for submitting an application and all documentation is June 1 for the Fall semester and December 1 for the Spring semester. Early application is strongly recommended.

Applicants who have been accepted for admission will receive the Certificate of Eligibility (Form I-20). This document is used to apply for a student (F-1) visa at an American embassy or consulate overseas. It is also used for transferring from one institution in the United States to another. F-1 students will be expected to enroll as full-time degree candidates (minimum 12 semester-hour credits).

The following application procedure should be followed:

1. Obtain from the International Student Service Office an international student admissions packet.
Address: International Student Service Office
Hawkins Hall, 103B
Towson State University
Towson, MD 21204
Telephone: (301) 321-2421
2. To be considered for admission, applicants are required to complete the official undergraduate application. A nonrefundable \$25 application fee must accompany all applications.
3. A Social Security number is required. If the applicant is in the United States and does not have a number, (s)he must obtain one before filing an application. If overseas, the applicant will be assigned a temporary number by the university when the application is received.
4. All applicants must complete an admissions file, including:
 - a. official or notarized secondary school academic records, showing grades received, annual mark sheets, examination certificates, and leaving certificate, as they apply to the educational system in the student's home country. *Records must be received for each of the last four years of secondary school;*
 - b. official or notarized record (transcripts) of all colleges, universities, post-secondary, or professional schools attended;
 - c. a notarized English translation of all documents. Translations must be as literal as possible with no attempt to translate information into the United States system of education. To evaluate post-secondary course work, it is sometimes necessary for the university to use a professional evaluation service at the applicant's expense (\$80-\$100). The university will notify the applicant if this service is required;
 - d. an official Test of English as a Foreign Language (TOEFL) result. *All* international students who do not speak English as their native language will be required to take the TOEFL examination. A minimum score of 500 is required. TOEFL examination dates (six times a year worldwide) and information may be obtained through the American Embassy, Consulate or U.S.I.A. office or by writing Educational Test-

ing Service, Box 899, Princeton, New Jersey 08541, U.S.A. The results will be reported to Towson State University if Towson State University is indicated on the TOEFL application (Code 5404);

- e. an official Scholastic Aptitude Test (SAT) result. All students who have not completed one full year of postsecondary school course work (25 United States semester-hour credits) must submit SAT results. The results will be reported to Towson State University if Towson State University is indicated on the SAT application (Code 5404);
 - f. financial certification form. This form will be contained in the international student admissions packet. The applicant will be required to provide an official financial statement verifying that \$12,500 is available annually. Acceptable methods of financial verification will be given with the financial certification form;
5. International students will be required to pay out-of-state tuition.
 6. Applicants who hold permanent resident or parole visa status must list their alien registration number in the space indicated on the undergraduate application. They are processed for fee purposes as State residents if they have established legal domicile in Maryland for six months. Presentation of an applicant's alien registration card for verification may be requested. Foreign academic records submitted for evaluation must be translated into English and notarized. An application and all documentation must be submitted by December 1 or June 1. If a permanent resident does not speak English as his or her native language and has resided in the United States less than five years, a TOEFL examination is required.
 7. Puerto Rican applicants who are U.S. citizens are processed for fee purposes as out-of-state applicants, unless they have established domicile in Maryland. If the academic background is Puerto Rican, the applicant must provide SAT scores to determine academic admissibility and a TOEFL result to determine English proficiency.
 8. *All* students for whom English is not their native language will be required to take an English placement test as specified in the "Undergraduate Admissions" section of this catalog.
 9. Applicants holding other types of visas may also apply to the university and should contact the International Student Service Office for admissions information.

SPECIAL ADMISSIONS PROGRAMS

Early Admission

Early admission enables a limited number of students to be admitted and to matriculate immediately following the completion of their junior year in high school. Students interested in early admission should apply through the normal application process. Their applications, however, must be accompanied by a letter of recommendation from either the high school counselor or principal. An official high school transcript should be submitted along with the results of the SAT tests. An interview with the Director of Admissions is also advisable.

On Campus Interviews

The Admissions Office offers the opportunity for prospective students to receive a personal evaluation of his or her admissions profile. Students are encouraged to call three weeks in advance of their visit to schedule an appointment with an admissions counselor.

Open House

Each fall, the admissions staff, faculty, administrative personnel, and students host a series of open house programs which offer

the visitor an opportunity to observe an actual university class, a tour of the campus, and assistance with their academic, extracurricular, residential, or financial aid concerns.

G.E.D. Recipients

Unless eligible for consideration under the veterans or mature adults policy, G.E.D. recipients are subject to SAT minimums required of the traditional freshman applicant, and must also present G.E.D. subtest (subject) scores of at least 50 in English Composition, social studies, natural sciences and/or literature (reading), together with a score of at least 60 in mathematics.

Mature Adults Policy

In order to be considered for admission under this policy, students must have a high school diploma or equivalency and must have at least a five-year break in their education (either high school or college attendance). Applicants are required to submit a formal application and official transcripts of all academic work attempted, but are excused from the S.A.T. requirement. Applicants seeking admission under this non-traditional policy are strongly encouraged to arrange for an interview with a member of the admissions staff prior to applying.

Mature students can be admitted regardless of previous academic records or standing, provided they achieve the minimum standards set by the university as measured by the following sections of the New Jersey College Basic Skills Placement Test: Reading, English Composition (Sentence Sense and Essay), Computation, and Elementary Algebra.

To ensure adequate time for admissions review, competency testing must be administered at least five weeks prior to the start of the semester of application.

Veterans

When submitting the application for admission, each veteran must provide the admissions office with a copy of a DD Form 214 as verification of military service in addition to high school or college transcripts. The SAT results are NOT required of veterans seeking full-time admission under this policy.

Any veteran with at least six months active duty in a major branch of the U.S. Armed Services, and a high school diploma or equivalency will be admitted to Towson State University despite previous academic records, provided he or she achieves the minimum standards set by the university as measured by the following sections of the New Jersey College Basic Skills Placement Test: Reading, English Composition (Sentence Sense and Essay), Computation, and Elementary Algebra.

To ensure adequate time for admissions review, competency testing must be administered at least five weeks prior to the start of the semester of application.

Veterans who have attended other colleges since their discharge are NOT included in this policy, and must seek admission through the normal transfer process.

Applications for V.A. benefits may be obtained from the Registrar.

Advanced Placement and Credit for Entering Students

Freshmen who have had the opportunity for advanced-level work and would like academic credit as well as advanced placement are required to take the Advanced Placement Tests of the College Entrance Examination Board in May of their senior year of secondary school. Arrangements to take the tests are made through the high school counselor or the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey 08540. The results of these tests are received by the university about July 15. The fol-

lowing standards are used for determining advanced placement credit:

ADVANCED PLACEMENT

Examination	A.P. Score	Policy
American History	1, 2	No credit
	3	Review of test booklet determines if credit can be awarded.
	4, 5	6 credits, HIST.145-146
Art History	All	No credit
Art Studio: Drawing	All	No credit
Art Studio: General	All	No credit
Biology	1	No credit
	2	4 credits, BIOL.110
	3, 4, 5	8 credits, BIOL.201-202
Chemistry	1, 2	No credit
	3	Placement into CHEM.102. Upon completion of CHEM.102 with "C" or better, 4 credits will be awarded for CHEM.101.
	4, 5	8 credits for CHEM.101-102
Computer Science	1, 2	No credit
	3, 4	Exempt from COSC.165—placement into COSC.336. Upon completion of COSC.336 with "C" or better, 3 credits will be awarded for COSC.236.
	5	Exempt from COSC.165—6 credits for COSC.165,236.
English Lit Comp or English Lang. Comp	1, 2	No credit
	3	Review test booklet
	4, 5	3 credits, ENGL.102
European History	1, 2	No credit
	3	Review test booklet
	4, 5	3 credits, HIST.242
French Language	1, 2	No credit
	3	19 credits, FREN.101-301
	4, 5	22 credits, FREN.101-302
French Literature	All	No credit
German Language	1, 2	No credit
	3	19 credits, GERM.101-301
	4, 5	22 credits, GERM.101-302
German Literature	All	No credit
Latin: Vergil	All	No credit
Latin: Cat-Horace	All	No credit

8 Housing

Mathematics Calculus AB	1, 2	No credit
	3, 4, 5	Placement into MATH.274. Upon completion of course with "C" or better, 4 credits will be awarded for MATH.273.
Mathematics Calculus BC	1, 2	No credit
	3, 4, 5	Placement into MATH.373. Upon completion of course with "C" or better, 8 credits will be awarded for MATH.273,274.
Music Listening	1, 2	No credit
Non-Majors	3, 4, 5	3 credits, MUSC.101
Majors	3, 4	No credit
Majors	5	6 credits, MUSC.101-102
Music Theory	All	No credit
Physics B	1, 2	No credit
	3, 4, 5	8 credits, PHYS.211-212
Physics C Mechanics or Elec/Magnetism	1, 2	No credit
	3, 4, 5	Review test booklet
Spanish Language	1, 2	No credit
	3	19 credits, SPAN.101-301
	4, 5	22 credits, SPAN.101-302
Spanish Literature	All	No credit

Prior to the change of schedule period, students are notified about advanced placement and credit. Additional information may be obtained by contacting the Director of Admissions or the appropriate departmental chair.

A bulletin of information about Advanced Placement Tests may be secured from the College Entrance Examination Board, P.O. Box 592, Princeton, N.J. 08540.

Credit for Experience or Prior Learning

Departments may grant credit to students for experience and previous learning when the student's achievement in a particular area is equal or superior to that of a student having earned a C in coursework in the area, the level at which credit is generally granted to transfer students. While departmental standards for granting credit for experience and previous training may exceed this minimum, credit may not be given when achievement is below "C" level work.

Departments may also offer advanced placement with no credit given.

When departments use standardized evaluative instruments, such as CLEP, the College Board advanced placement tests, or others, the same principle shall apply. If the faculty member's evaluation reveals that the student's achievement is equal or superior to that of a student having earned a "C" in similar coursework, the department will report the grade of "PE" to the registrar.

DANTES/CLEP general examinations can be considered with appropriate documentation adhering to the minimum guidelines recommended by the American Council on Education (ACE).

Students may use military courses and experience as part of the 32 credits allowed through Credit for Prior Learning. Students should be admitted degree candidates and have completed one

successful semester at TSU prior to submitting the AARTS transcript or other appropriate documents.

For further information, and a complete list of courses available through the Credit for Prior Learning option, contact the CPL/CLEP Coordinator, College of Continuing Studies, 321-3317.

Housing

Newell Hall, Lower Level (301) 321-2516

Director of Residence: Mary Lee Farlow

RESIDENCE SERVICES

The residence program provides living facilities for full-time degree candidates and promotes educational programs and activities which supplement the academic mission of the university. The residence staff and the elected executive board of the residence council strive to maintain an environment encouraging academic excellence, self-reliance, and leadership.

Residence services at Towson State University provide oncampus housing for approximately 2,900 students and aid in securing off-campus residence for others. A referral service for offcampus housing is provided through the Residence Office. Students in need of off-campus housing may obtain listings of rooms and apartments available in the Towson area.

Students participating in specific educational programs and carrying a minimum of twelve (12) credits are given priority when space is assigned. Those leaving the residence program will not be guaranteed readmission unless they leave to participate in a Towson State University academic program and have made prior arrangements with the Director of Residence.

All resident students must sign a yearly contract for university housing, renewable at the option of the university, and must carry a minimum of twelve credits. Each resident is expected to vacate upon completion of his or her final semester examination.

Residence facilities are available to students only when classes are in session. No student is permitted to remain in residence more than 48 hours after ceasing to attend classes or dropping below the 12 credit minimum.

RESIDENCE HALLS

RESIDENCE TOWER—A 15-story residence hall houses 463 students. It includes lounge areas, classroom space, conference rooms and recreation areas.

NEWELL HALL—The first residence hall built on the university campus, it houses 220 students, it has been renovated to provide double-loaded corridors and small lounges, bathrooms and student bedrooms. The building also houses the recently remodeled dining facilities.

RICHMOND HALL—The second building erected for student housing, it houses 122 students in facilities similar to those of the adjacent Newell Hall.

WARD AND WEST HALLS—Built in 1951, these twin residence halls are located on the northern perimeter of the campus. The halls house both men and women, and each accommodates about 57 students.

PRETTYMAN AND SCARBOROUGH HALLS—Built around a court garden featuring a statue of the university mascot, these twin residence halls, completed in 1956 and 1964, provide rooms for 164 students each.

GLEN RESIDENCE COMPLEX—Four residence towers and dining facility accommodate 1,684 students. Each tower houses approximately 400 students in a suite design, *i.e.*, two double rooms

with a connecting bath. The complex is the newest campus living facility—completed 1983.

Expenses

PLEASE NOTE: Expenses are estimates at the time of printing this *Catalog* and are subject to revision. Tuition, housing and boarding costs, and other fees are subject to change at any time by action of the Board of Trustees.

TUITION

Maryland residents who enroll full-time in programs of the university pay \$681.00 per semester tuition. Out-of-state tuition is \$1,415.00 per semester.

Part-time students (those who register for less than 12 semester hours) pay \$63.00 per credit hour (undergraduate) or \$86.00 per credit hour (graduate).

UNIVERSITY FEES

A comprehensive fee is charged each student each semester. This yearly fee is \$540 for a credit hour load of 12 or more credits and \$175 for a credit hour load of less than 12 credits. The yearly fee includes fees for student activities, athletics, the University Union, registration, mailing, and technological enhancement. Non-resident, undergraduate and graduate, part-time students will also be assessed a \$10 per semester out-of-state surcharge.

HOUSING AND BOARDING COSTS

Depending upon the room and board plan selected, students living on campus may pay approximately \$1,940.00 per semester for room and board. Students living off-campus may purchase a meal plan averaging \$744.00 per semester.

As residence space becomes available, those students who are eligible will be requested to room in one of the resident complexes. For those students who enter the residence hall after the beginning of a semester, the charge will be prorated for the remainder of the semester plus one week. (For exact rates contact the Residence Office.)

OTHER FEES AND EXPENSES

A graduation fee of \$20.00 is required for those receiving a bachelor's degree. The fee for those receiving a master's degree, plan A (with thesis) is \$30.00, plan B (without thesis) is \$25.00.

Students are expected to buy the textbooks for their courses, which may be purchased in the University Store.

A late registration fee of \$75 is charged to any student who does not register as prescribed.

A late change of course fee of \$5.00 is charged to students for making student-initiated changes in their academic schedule.

Students enrolled for practice teaching (student teaching) or a clinical practicum are charged a fee ranging from \$100 to \$250 per experience. Students must confer with their department chair or with the director of student teaching to determine the exact fee.

All students are required to register their automobiles with the university in order to obtain a parking permit. This permit does not guarantee a space on campus, but is necessary in order to park on campus. The cost of these permits is:

Annual '88-'89	\$49.00
Fall 88/Minimester '89	\$26.00
Spring '89/Summer '89	\$26.00
Summer '88	\$14.00

TUITION AND FEES

Student Type	Residence Status	Tuition*	Comprehensive Fee	Surcharge Out of State
Undergraduate				
less than 12 crs.	In State	\$ 63/cr.	\$ 87.50 flat	
less than 12 crs.	Out of State	\$ 63/cr.	\$ 87.50 flat	\$10 flat
Undergraduate				
12 or more crs.	In State	\$ 681 flat	\$270.00 flat	
12 or more crs.	Out of State	\$1,415 flat	\$270.00 flat	
Graduate				
	In State	\$ 86/cr.	\$ 87.50 flat	
	Out of State	\$ 86/cr.	\$ 87.50 flat	\$10 flat

*Refer to Appendix C of the current *University Catalog* for tuition residency qualifications.

INSURANCE PLAN

A sickness and accident insurance plan designed especially for the students of Towson State University is offered at a nominal fee. While this plan is voluntary, some basic medical coverage is required of all students who live on campus as well as students who participate in any physical education class or extracurricular athletics. Proof of sufficient coverage must be submitted to the Residence Department. Billing statements will not reflect the cost of the insurance. Enrollment is handled directly through the insurance company. Should a student withdraw from the university, coverage will remain intact for the policy year. Any questions regarding coverage should be directed to the Health Center, Ext. 2466.

PAYMENT OF FEES

All checks or money orders should be made payable to Towson State University for the exact amount of the charges. The student's social security number must appear on all checks submitted to the university. The university has no deferred payment plans. The *MasterCard* and *VISA* credit cards can be used for tuition, fees, room, board, and other charges. When a check given in payment of fees, fines, or services is returned unpaid by the bank for any reason, a penalty fee of \$50.00 is charged. Failure to reimburse the university for a bad check can result in denial of readmission.

Financial policy set by the Board of Trustees and supported by the legislative auditors of the state of Maryland states that *all previous balances must be paid prior to registration for the following academic semester*. The university employs a "first in/first out" technique when applying payments to accounts. Therefore, payments are used to satisfy the oldest outstanding charge prior to applying any portion of a payment to current or more recent charges. Should the account of any student be sent to the Central Collection Unit of the state of Maryland because it is deemed delinquent, a 15 percent collection fee will be charged to the student. Students with outstanding balances should contact Financial Operations. Transcript requests will not be honored if a student has a financial obligation to the university.

ADVANCE PAYMENTS

Each applicant must pay a non-refundable application fee of \$25.00, and no application will be processed without this fee or a valid waiver.

Once the student is admitted, a non-refundable \$100.00 enrollment fee must be forwarded to the Admissions Office to reserve his or her place in the class. The \$100 enrollment fee includes a \$40 new admit fee with the remaining \$60 applied as a deposit toward tuition charges.

A \$25 fee must accompany every application for on-campus residence. This fee is non-refundable; however, the credit will be applied to the student's room and board account.

Upon notification from the Residence Office that dormitory space is available, students must make a \$100.00 room reservation deposit. This fee is applied to the final charge reflected on the statement of fees payable at the time of registration.

The room deposit is refundable if the student cancels the application and notifies the Admissions and Residence offices in writing prior to June 30 for those entering fall semester, prior to December 30 for spring semester, or if the university denies admission to the applicant. The fee is forfeited if notice of cancellation is received after these dates.

REFUNDS ON WITHDRAWAL

A student withdrawing from the university must complete an official withdrawal form from the Student Services Office, Dowell Hall, 2nd level, before he or she is entitled to any refund. The date of withdrawal will be the date the card is filed.

For additional information regarding withdrawal, see the academic regulations section of this *Catalog*.

Refund Policies

Towson State University shall adhere to the following policies with respect to refunds of tuition, room and board fees, and other charges.

Tuition

Undergraduate Students Registering for 11 Credits or Less and Graduate Students

- Notification of instructor does not constitute proper withdrawal. The date on which written notice of withdrawal is received determines the amount of refund. The timing for effecting tuition refunds (except for the summer session) shall be as follows:
 - Prior to the end of each registration period, all tuition shall be refunded to the student.
 - After the end of each registration period, but prior to the 15th calendar day after the beginning of classes for that session at the university, 80 percent of tuition shall be refunded to the student.
 - Beginning with the 15th day and until the end of the third week after the official beginning of classes for that session at the university, 60 percent of tuition shall be refunded to the student.
 - During the fourth week after the official beginning of classes for that session at the university, 40 percent of tuition shall be refunded to the student.
 - During the fifth week after the official beginning of classes for that session at the university, 20 percent of tuition shall be refunded to the student.
 - After the end of the fifth week from the official beginning of classes for that session at the university, no tuition shall be refunded to the student.

Tuition

Undergraduate Students Registering for 12 Credits or More

- The refund policy for undergraduate students registering for 12 or more credits is applicable only to total withdrawal, not to individual classes. The timing for effecting tuition refunds for total withdrawal shall be the same as 1 above.

FEES

All Students

- The timing for the following *fee* refunds (including the summer session) shall be as follows:
 - Registration/application fee—non-refundable.
 - Room deposit fee—non-refundable after June 30 prior to the fall semester or after December 30 prior to spring semester.
 - Board fee shall be pro-rated on a weekly basis.
- The following fees are non-refundable after the official start of classes (including the summer session) as indicated below:
 - Room rent fee.
 - Mandatory university fees.
 - Auto registration fee.
 - Applied fees (private instruction).
- Full-time day students who are of the opinion that major extenuating circumstances (e.g. personal illness, serious accident) are primary factors in their decision to withdraw from the university, and who are not satisfied with the refund due based upon the schedule above, should contact the Student Services Office.

Financial Aid

NOTE: Programs are subject to legislative change.

Administration Building, Room 101, (301) 321-2061

Director: Marilyn Ojodu

Every attempt is made to assist eligible students who show need, however, limited funds may make it impossible for the university to meet the full need of each eligible student. The "need" of a student is the difference between the "cost of education" and the amount that the family is expected to contribute. This "Expected Family Contribution" is determined by a need analysis system approved by The U.S. Department of Education. Because a family's financial status changes from year to year, all students who seek assistance must reapply each year.

Awarding parameters vary each year. Information is available upon request from the Financial Aid Office.

Students who receive financial aid from the university are required to report any changes in their financial, marital or academic status in writing to the Financial Aid Office. Receiving additional funds from any source not reported on the original application may result in a reduction in aid offered from the university. If a student financial aid recipient receives aid in excess of his or her financial need, that student may be required to repay financial aid funds already disbursed.

Students who receive financial aid must be *formally admitted to the university as degree candidates* and must enroll on at least a half-time basis. Recipients must make satisfactory progress towards a degree and must meet the university standards for academic good standing (see Regulations Governing Academic Standards and Appendix E for a full detail of requirements).

Students who withdraw or stop attending classes before the end of the semester will have their aid prorated in the same proportion of Title IV funds to non Title IV funds to cover reasonable costs for the period of attendance involved. Refer to Refund Policies for an explanation of cost reductions. If a student does not live on campus, the living expenses assumed in a Financial Aid budget will be prorated for the period of attendance. Repayment of Financial Aid funds received may be required. If a reduction or

repayment of funds is required, the order of reduction is as follows if applicable:

Title IV funds

Carl D. Perkins/National
Direct Student Loan
Supplemental Educational
Opportunity Grant
Pell Grant
Guaranteed Student Loan
Plus Loan or Supplemental
Loans to Students
State Scholarship

Non-Title IV funds

Institutional Grant
Other Race Grant
School Scholarship
Non School Scholarship

APPLICATION PROCEDURES FOR UNIVERSITY FINANCIAL AID PROGRAMS

Students who wish to apply for financial aid must complete a College Scholarship Service *Financial Aid Form* (FAF), the university's Supplemental Form A. Student Aid Reports (sent directly to your home when you apply for a PELL Grant), and signed, dated, copies of student and parents income tax forms. In addition, any student who has ever attended another post secondary (after high school) educational institution must submit financial aid transcripts from each school, regardless of whether or not aid was received. No application will be considered complete until all of these forms are received by the Financial Aid Office.

The university's financial aid application deadline date is March 15, for the following academic year. Students may apply as early as January 1, but no later than at least six weeks in advance of the deadline date. This allows time for the College Scholarship Service to process the FAF and forward it to the Financial Aid Office. Although incoming freshmen and transfer students are not offered financial aid until they have been formally admitted to the university, they must meet the same application deadline. Incoming students should *NOT* wait to receive admission to the university before applying for aid.

DIRECT FEDERAL AID PROGRAMS

The **Pell Grant** provides grants to first bachelor degree candidates who are citizens or permanent residents of the U.S. Grants generally range from \$250-\$2200 and may be received if financial need is demonstrated. The Financial Aid Form (FAF) may be used to apply for this program when the student applies for campus-based aid and state scholarships.

The **Guaranteed Student Loan Program (GSL)** is a low interest loan made by a commercial lender such as a bank, credit union, or savings and loan association. In Maryland this program is called the Maryland Higher Education Loan Program.

For new borrowers, the interest rate is 8%. Students who have already borrowed at 7% or 9% interest rate will continue to borrow at that same 7% or 9% rate. At the time the loan is made, the lender charges two fees: a United Student Aid Funds insuring fee and a loan origination fee authorized by the Federal government. These fees are usually deducted from the loan proceeds. No interest is charged to the student, and no repayment is required until six months after the borrower graduates or leaves school or drops below a half-time course load. When repayment begins, the minimum payments are \$50 per month. The actual payments will depend upon the total amount borrowed. Borrowers may have up to ten years to repay in full, although the entire loan or any portion of it may be repaid at any time without penalty.

Undergraduate students may borrow up to \$2,625 for their first and second year of attendance and \$4,000 a year for the next undergraduate years to a maximum of \$17,250. Graduate or professional students may borrow \$7,500 per year for a maximum of \$54,750, including any loans made at the undergraduate level.

Applicants must complete a GSL application and university application for financial aid, the College Scholarship Service Financial Aid Form (FAF), and turn in their Student Aid Report (SAR) to the Financial Aid Office. The eligibility requirements are subject to change by the Federal government or state government. Additional documentation may be required.

Parents Loans to Undergraduate Students (PLUS) or Supplemental Loans to Students are loans made to the parents of dependent students, or to graduate or self-supporting undergraduate students.

For each student, a parent can borrow up to \$4,000 per academic year to a maximum total of \$20,000.

Independent undergraduates and graduate students can borrow up to \$4,000 per academic year to a maximum total of \$20,000.

A loan can be made equal to the cost of education minus any other financial aid received. Students should apply for PLUS loans only after they have applied for the GSL and other forms of financial aid.

The interest rate is variable and begins to accrue on the day the loan is disbursed. The first payment is due within 30 days of disbursement, and borrowers usually have five years to repay the loans.

NOTE: Students applying for aid from TSU and who are eligible to apply for the Pell Grant are *required* to do so before aid from the university will be awarded.

CAMPUS BASED FINANCIAL AID PROGRAMS

The term "campus based" refers to financial aid programs for which the university receives a limited amount of money each year. All of these programs are need-based. Each eligible student will receive an award letter listing the types and amounts of aid offered. The student must respond to this offer within two weeks or the offer is cancelled.

Supplemental Educational Opportunity Grants (SEOG) are grants to undergraduate, first bachelors degree candidates with financial need.

Other Race Grants (ORG) are grants for minority undergraduate students who are Maryland residents and U.S. citizens. ORG recipients must enroll for and maintain a full-time status (12 credits).

Institutional Grants are a university funded program open to undergraduate students. IG recipients must enroll and maintain full time status (12 credits).

The **Perkins Loan Funds** (formerly National Direct Student Loan) program offers loans to undergraduates and graduate students at 5% interest. No interest accrues, and no repayment is due until nine months after the borrower graduates, drops below half time, or leaves school. Payments depend on the total amount borrowed. The minimum payment is \$30.00 per month, principle and interest. The maximum an undergraduate student may borrow for all years of study is \$9,000. Graduates may borrow a total maximum of \$18,000, including any amount borrowed as an undergraduate.

The **Nursing Student Loan Program** offers loans to students who have been accepted into the nursing program.

The **College Work Study** program allows undergraduate and graduate students to work on or off campus. A CWS eligibility is assigned to qualified students as a part of their financial aid. This eligibility is the maximum dollar amount that can be earned. It is the responsibility of the student to find a CWS job and to monitor earnings so as to avoid exceeding the CWS eligibility. Most positions pay \$3.35 per hour as a starting wage and students are paid every two weeks for hours worked.

NOTE: Graduate and second degree bachelor candidates may apply only for the Carl D. Perkins National Direct Student Loan, Guaranteed Student Loan, Plus Loan, Supplemental Student Loan, and College Work Study.

More detailed information on financial aid programs and eligi-

bility requirements are available on request from the Financial Aid Office.

STATE SCHOLARSHIPS

The state of Maryland each year awards scholarships in several categories to legal residents of the state. These scholarships are awarded based on financial need and/or academic achievement. Students may apply for State Scholarships by using the Financial Aid Form.

The state of Maryland each year awards General State, House of Delegates, and Senatorial Scholarships to legal residents of the state. Interested high school students should consult school counselors. Students presently enrolled at Towson State University may obtain an application from the financial aid office or the State Scholarship Board, 2100 Guilford Avenue, Baltimore, Maryland 21218. The application deadline is March for the following academic year.

STUDENT EMPLOYMENT

Jobs are available in various departments on-campus under the Regular Student Employment (RSE) Program. The starting salary for most on-campus jobs is \$3.35 per hour and students are paid every two weeks for hours worked. Job descriptions are posted on a bulletin board. Financial need is not a criteria, although students receiving campus based financial aid may be limited in the amount they can earn.

The Part-Time Jobs Office assists students in locating off-campus part-time jobs within the Baltimore-metropolitan area. A variety of jobs are available. For additional information phone (301) 321-2730.

On-campus and off-campus positions are posted and updated on the job boards in the university union.

Clearance through the Financial Aid Office is required for on-campus employment. Off-campus jobs are posted on the job boards as they are received from outside organizations during the academic year and summer. These jobs include work for a variety of community agencies, businesses, and summer camps.

SALARY AND EMPLOYMENT INFORMATION

Federal regulations governing the university's participation in financial aid programs require that it provide information regarding average annual salaries which can be expected by Towson graduates in specific *career-related fields of study*, for example: nursing, accounting, teaching, etc. Also required is information on the success of recent Towson graduates in obtaining positions in specific *career-related fields of study*. This information can be obtained from the Career Placement Office located in the university union, room 217.

Scholarships Information

Administration Building, Room 113, (301) 321-3702

Coordinator: Carmel Hayden-Woelper

This office operates on a part-time basis and is the clearing house for information about Towson State University's student scholarships and awards *not* administered by the Financial Aid Office and characterized by criteria such as academic excellence and special merit in related fields of study.

PRIVATE SCHOLARSHIPS

Recipients of *private scholarships*, from outside organizations, should contact the Grants, Contracts and Scholarships section of the Budget Office, (301) 321-2216, for *special* processing instructions. Scholarships must be processed according to criteria established by the donor and/or Towson State University. Any outstanding balance created by the student's or donor's failure to provide the university with adequate, timely information becomes a financial obligation to the student.

ARMY AND AIR FORCE ROTC SCHOLARSHIPS

For information, please refer to the description of "Military Science Programs" in the "University Curriculum" section of this *Catalog*.

SCHOLARSHIPS AND AWARDS

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
ADMISSIONS			ALUMNI SCHOLARSHIPS		
Board of Trustees Merit Grants	Annual tuition and fees (up to 12 new recipients each year) Application deadline: December 1st	CRITERIA Entering freshmen, Maryland resident: 3.50+ GPA, 1200+ combined SAT. Entering transfer students Maryland resident: 3.60 cumulative GPA and Associate of Arts degree from a Maryland community college. Applications and all necessary credentials must be received by Dec. 1st. This deadline is in effect for both Fall and Spring entrants. Interview with the University Scholarship Committee required to determine community awareness, involvement and spirit. Renewable for eight consecutive semesters (four for transfers) if student maintains 3.25 GPA and full-time status at this university. Recipients will be asked to render special services to the university community. No separate application is needed for scholarship consideration; nominations made on the basis of admissions material. CONTACT Ms. Linda Collins (301) 321-2112 or toll free in continental U.S. 1-800-492-GRAD	University Scholarships	\$1,000. Number limited. Nonrenewable (recipients eligible to compete for Helen Aletta Linthicum Scholarship after 1st year. Applications and all necessary credentials must be received by Dec. 1st.	CRITERIA <i>Entering Freshmen:</i> Maryland resident 3.50 minimum cumulative GPA and 1200 minimum combined SAT. <i>Transfers:</i> 3.60 GPA with AA degree from Maryland community college. Selected after interview with University Scholarship Committee. No separate application is needed for scholarship consideration. CONTACT Ms. Linda Collins (301) 321-2112 or toll-free in continental U.S. 1-800-492-GRAD
Helen Aletta Linthicum Scholarships	\$1,000 (6-12) non-renewable Application deadline: No application	CRITERIA Students eligible for this scholarship must have received the University Scholarship the previous year. Determination of this competitive scholarship is made by the Admissions Office based on highest GPA's. CONTACT Admissions Office (301) 321-2112	Alumni Distinguished Scholar Awards	\$1,000. Up to 5 annually. Application deadline: March 30.	CRITERIA Eligible candidates must be a son or daughter of a Towson State University alumnus current full-time degree candidate with a minimum of 75 credits and a 3.50 GPA. CONTACT Alumni Services (301) 321-2234
Minority Merit Awards	From \$1,000 to full tuition and fees: min. of 20 awards Application deadline: March 1st	CRITERIA U.S. citizen, Racial Minority. Academic achievement; leadership potential. <i>Freshmen:</i> Maryland resident; 3.00+ GPA; 800+ combined SAT; each score being above 400. <i>Transfers:</i> Maryland resident; 3.00 GPA with AA degree from a Maryland community college. CONTACT Ms. Angel Jackson (301) 321-2112	Outstanding Man and Woman Awards	\$1,000 (2) annually. Application deadline: September 30	CRITERIA Full-time degree candidate, scholastic achievement, university and community extracurricular involvement, communication skills. Candidates are selected from applications for interview. CONTACT Alumni Services (301) 321-2234
Provost's Scholarships	\$500; 20 annually. Application deadline date: Applications and all necessary credentials must be received by Dec. 1st	CRITERIA <i>Entering Freshmen:</i> Graduating seniors from high school, applying into fulltime undergraduate degree candidacy, citizens of U.S., residing either in or out of the state of Maryland, whose cumulative academic GPA from grades nine through twelve is a 3.25 or higher, and whose SAT results are a combined 1150 or higher. <i>Entering Transfers:</i> Recipients of an A.A. degree, applying for fulltime undergraduate degree candidacy, citizens of the U.S., residing either in or out of the State of Maryland, whose cumulative transfer GPA from the degree granting institution is a 3.25 or higher. This standard should be maintained throughout the course of the student's A.A. career. Not renewable to same student either Freshmen or transfers. CONTACT Ms. Linda J. Collins (301) 321-2112 Toll-free in Continental U.S. 1-800-492-GRAD	TSU ATHLETIC DEPARTMENT		
			TSU Athletic Scholarships	Amount Varies Application deadline: varies	CRITERIA Varies (Grants-in-aid) CONTACT Athletic Department (301) 321-2758 or Head Coach of the sport
			Edward Aleshire Memorial Scholarship	\$2,500 per year (1) Renewable to same student. Application deadline: July 15 (unless otherwise extended).	CRITERIA Baltimorean playing or will play football, need, 2.50 GPA. If a Freshman, must have a "B" average from High School. Recipient selected by Selection Committee. CONTACT Mr. Bill Hunter (301) 321-2758
			Joe McMullen Athletic Scholarship	Up to \$1,000 Application deadline: Undecided	CRITERIA Junior or Senior, degree candidate with honors average. Selection made on basis of athletic accomplishments, character, and community spirit CONTACT Athletic Department (301) 321-2758
			Rachuba Enterprises Scholarship Endowment	Amount varies. 1 annually. Renewable to same student if Athletic Director so desires. Application deadline: To be announced.	CRITERIA Junior or Senior athlete with a 2.50 GPA or better. CONTACT Mr. Bill Hunter (301) 321-2758

SCHOLARSHIPS AND AWARDS (Continued)

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
COLLEGE OF ALLIED HEALTH SCIENCES AND PHYSICAL EDUCATION			COLLEGE OF EDUCATION		
Dean's Scholarships	\$500 Application dead- line: April 15	CRITERIA Open to all fulltime under- graduate or graduate degree candi- dates. <i>Freshmen:</i> 3.00 GPA and/or 1100 SAT's. <i>Transfer students:</i> 3.00 GPA. <i>Graduate students:</i> 3.50 GPA. Candidates must be interviewed and receive recommendation of a faculty committee in the department of spe- cialty. CONTACT Dean of College or Department Chair (301) 321-2124	Sarah and David Cornthwaite Scholarship	\$100-\$150 Application dead- line: May 1	CRITERIA Based on financial need, grade point average, student honors, and activities. CONTACT Dr. Frances Bond (301) 321-3998 Mr. Francis LeMire (301) 321-2233
Communication Sciences and Disorders			Teacher Education (Critical Shortage) Grants	Tuition	CRITERIA Undergraduates who have completed 60 credit hours, have a cu- mulative GPA of at least 3.00 enrolled in a program leading to certification as a teacher in one of the areas of critical shortage. CONTACT State Board of Education
Linda McClung Memorial Loan Fund	\$250 Loan Application dead- line: None	CRITERIA Full-time graduate student in Speech-Language Pathology and Audiology CONTACT Dr. Joyce Reitzel (301) 321-3097	Early Childhood Education		
Health Science			Dean's Scholarships	\$500 Application dead- line: April 15 for Fall; November 15 for Spring	CRITERIA Full-time degree candidates who are enrolled in or have completed "The Integrated Curriculum." GPA of 3.20. Transfer students must have com- pleted at least 30 credits at TSU by the end of semester of application. Essay. CONTACT Department Office (301) 321-2564
Dean's Scholarships	Varies; 2 or 3. Ap- plication deadline: mid April	CRITERIA Based on faculty review of written work. CONTACT Dr. Neil Gallagher (301) 321-2378	Alice B. Gibson Scholarship	Amount varies Application dead- line: April 15	CRITERIA Upperclassman majoring in Early Childhood Education CONTACT Dr. Frances Bond (301) 321-3998
Health Education Working Fellowship	\$500/one semester Application dead- line: 1st week in September for Fall, December 15 for Spring	CRITERIA Health Science undergradu- ate, fulltime, 2.50 GPA, marketable skills. Recipient will work for sponsor- ing faculty member for approximately 10 hours a week per semester. CONTACT Dr. Jack Osman (301) 321-2637	Brian C. Reuling Memorial Scholarship	\$200 Application dead- line: April 15	CRITERIA Early Childhood Education major; pays cooperating teacher's hono- rarium CONTACT Ms. Patricia Waters (301) 321-2564
Nursing			C. James & Zenith H. Velie Memorial Scholarship	\$200 Application dead- line: April 15	CRITERIA Early Childhood major or Elementary Ed. major; pays cooperating teacher's honorarium CONTACT Dr. Frances Bond (301) 321-3998
Rena & Dewey Farbman Memorial	\$100 Application dead- line: Undecided	CRITERIA Financial need, good aca- demic standing, sophomore CONTACT Mrs. Mollick (301) 321-2067	The Irene M. Steele Most Promising Teachers Award	2/5125 Winners, 2/575 Honorable Mentions By nomination	CRITERIA Early Childhood or Elemen- tary Ed. major, graduating senior, min. 3.25 GPA CONTACT Mr. Keith Martin (301) 321-2432
Occupational Therapy			Audna Elizabeth Thompson Scholarship	\$200-\$250 Application dead- line: April 15	CRITERIA Full-time degree candidate in Early Childhood or Elementary Edu- cation, resident of Maryland, GPA 3.00 CONTACT Dr. Frances Bond (301) 321-3998
Henrietta Price Scholarship Loan	\$500 application dead- line: April 15	CRITERIA Candidate must have Junior Class standing in the Occupational Therapy Program and be a member in good standing of the national student organization of American Occupational Therapy Association. CONTACT Ms. Marie-Louise Blount (301) 321-2640	Elementary Education		
COLLEGE OF CONTINUING STUDIES			Alice B. Gibson Scholarship	Amount Varies Application dead- line: April 15	CRITERIA Upperclassman majoring in Elementary Education CONTACT Mr. Keith Martin (301) 321-2432
College in Escrow Scholarships	Tuition for one course excluding fees (20) Application dead- line: varies.	CRITERIA Current High School stu- dents with a 3.25 average (academic subjects only), letters of recommenda- tion and required essay. CONTACT Ms. Caroly Harriger (301) 321-2471	Dean's Scholarship	\$500 Application dead- line: April 15 for Fall; November 15 for Spring	CRITERIA Full-time degree candidate; transfer students registered for at least 30 credits at TSU. Must be enrolled in or completed "The Child and the Ele- mentary School Curriculum" course. GPA of 3.20. Must submit written state- ment of approximately 500 words on in- terest and views about teaching. CONTACT Department Office (301) 321-2565
Dean's Scholarships	\$250 (8) per semes- ter Application dead- line: April 1 for Fall; November 1 for Spring	CRITERIA Degree candidate carrying at least 6 credits and a maximum of 11 credits, Maryland resident, 25 years of age or older [GPA of 3.50 or better] CONTACT Ms. Frances Allison (301) 321-2031	Minnie V. Medwedeff Endowment Scholarship	Amount Varies Application dead- line: April 15	CRITERIA One upperclass student CONTACT Mr. Keith Martin (301) 321-2432
"It's On Us"	1 Course (3 per se- mester) Application dead- line: January 2 for Spring; August 1 for Fall	CRITERIA 23+ years old, G.E.D., or high school graduate, a part-time un- dergraduate student, never attended Towson State University. CONTACT Ms. Frances Allison (301) 321-2031			

SCHOLARSHIPS AND AWARDS (Continued)

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
Elementary Education (Continued)			Art		
Audna Elizabeth Thompson Scholarship	\$200-\$250 Application deadline: April 15	CRITERIA Full-time degree candidate in Early Childhood or Elementary Education, resident of Maryland, GPA of 3.00. CONTACT Dr. Frances Bond (301) 321-3998	Dean's Scholarships	Amount Varies. Application deadline: varies	CRITERIA Varies. CONTACT Mr. James Flood (301) 321-2142
The Irene M. Steele Most Promising Teacher Award	2/\$125 Winners, 2/\$75 Honorable Mentions By nomination	CRITERIA Early Childhood or Elementary Education major, graduating senior, minimum 3.25 GPA. CONTACT Mr. Keith Martin (301) 321-2432	Dance Scholarships	\$500 to \$2,000 Application deadline: Prior to May of each year	CRITERIA Full-time Dance major and member of the TSU Dance Company. Acceptance in the major program and Dance Company is by audition. Scholarships are renewed each year as long as the criteria are met and the student remains in good academic standing. Scholarships are awarded based on talent. CONTACT Dr. Helene Breazeale (301) 321-2760
The Bettie Tribull Messenger Memorial Scholarship	\$1,000 Application deadline: April 15	CRITERIA Elementary Education major preparing to student teach CONTACT Mr. Keith Martin (301) 321-2432	Music		
Secondary Education			Diekmann Music Scholarship	\$300 (1) Annually Application deadline: May 1	CRITERIA 3.00 average in Music courses, 2.50 average in general university requirements. Recruitment and retention of oboe player. CONTACT Dr. David Marchand (301) 321-2143
Dean's Scholarship	\$500 Application deadline: April 15 for Fall; November 15 for Spring	CRITERIA Full-time degree candidates; transfer students must have completed at least 30 credits at TSU by end of semester of application. Must be enrolled in or completed "Principles of Secondary Education," Junior standing and GPA of 3.20. Essay. CONTACT Department Office (301) 321-2685	Double Reed Scholarships	\$100-\$300 semester. (Number varies) Application deadline: Undecided	CRITERIA Bassoon or Oboe player Major CONTACT Dr. Harold Griswold (301) 321-2821
Instructional Technology			Peggy and Yale Gordon Foundation Award	Awards of \$750, \$500, and \$250. Application deadline: Undecided	CRITERIA Towson State University music major currently enrolled in private lessons and sponsored by a Towson State University faculty member. Performance competition each Fall semester. CONTACT Dr. David Marchand (301) 321-2143.
Dean's Scholarships	\$500 Application deadline: April 15	CRITERIA Financial need. Full-time degree candidates, undergraduate transfers must have completed at least 30 credits at TSU by end of semester of application. Junior standing with GPA of 3.20. Graduate students must have been granted full admission and registered for classes fulltime. Essay. CONTACT Coordinator or Dean's Office (301) 321-2575	Marching Band Stipend	\$50-\$250 Application deadline: June 1	CRITERIA Must be in the Band and other instrumental ensembles. CONTACT Mr. Dana Rothlisberger (301) 321-2765
COLLEGE OF FINE ARTS AND COMMUNICATION			Music Department Scholarships	\$50-\$400 Application deadline: Feb. auditions	CRITERIA Must be Music major or minor. Based on talent. CONTACT Mr. David Phillips (301) 321-2836
Fine Arts Scholarship Endowment	Amount Varies. Application deadline: varies	CRITERIA Funds disbursed to individual departments. Each department in the Arts determines selection procedure and funds allocation. CONTACT Department Chairs	Henry Sanborn Music Scholarship	Varies from \$400-\$600 Application deadline: early Spring semester	CRITERIA Annual awards given to voice and piano student. Fulltime degree candidate, Music major, at least 3.00 GPA. Must have completed 30 semester hours; 15 must be at TSU. CONTACT Dr. David Marchand (301) 321-2143
Dean's Scholarship	Amount Varies. Application deadline: varies	CRITERIA Funds disbursed to individual departments. Each department in the College of Fine Arts and Communication determines selection procedure and funds allocation. CONTACT Department Chairs	Talent Awards	\$100 Application deadline: March 1	CRITERIA Based on competitive auditions in Spring semester, Music major or minor CONTACT Dr. David Marchand (301) 321-2143
The Jack F. Tolbert Memorial	Amount Varies. Application deadline: March 15	CRITERIA Full-time junior or senior with at least a 3.00 GPA and need. Selection by committee. CONTACT Dean Gilbert Brungardt (301) 321-3288	Towson State University Bassoon and Oboe Scholarship	Amount Varies By audition.	CRITERIA Granted through audition only. CONTACT Dr. Harold Griswold (301) 321-2821
The Franklin and Alice Cooley Scholarships for the Arts	Amount Varies. Max. of 4—annually; one-half in September; one-half in January. Application deadline: March 15	CRITERIA To be awarded to talented students in the Arts. Criteria are determined by each department in the Arts. CONTACT Dean Gilbert Brungardt (301) 321-3288	C. James Velie Memorial Scholarship	Approximately \$200; may be divided and awarded to more than one applicant. Number varies. Application deadline: April 15	CRITERIA Music performance, 3.00 GPA, potential for success as music teacher. Ability to perform before faculty audition. CONTACT Dr. Theldon Myers (301) 321-2830

SCHOLARSHIPS AND AWARDS (Continued)

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
Speech and Mass Communication			Dean's Scholarships (Freshmen)		
The Eddie Ballard Award for Journalism	\$400 (1 per year) Annually. Spring graduation. Application deadline: To be announced.	CRITERIA A graduating journalism major who has demonstrated outstanding achievement and promise in the field of journalism. CONTACT Dr. S. J. Kim (301) 321-2889	Dean's Scholarships (Freshmen)	\$50-\$500 Application deadline: April 15	CRITERIA Three (3) letters of recommendation from people familiar with work. SAT 1000 and must submit work for evaluation. CONTACT Theatre Department (301) 321-2786
Baltimore Business Journal Scholarship	\$1,000 Application deadline: March 31	CRITERIA Full-time student with at least 24 credit hours in major. Overall university GPA of at least a 3.20. CONTACT Dr. S. J. Kim (301) 321-2889	COLLEGE OF NATURAL AND MATHEMATICAL SCIENCES		
Broadcasting Scholarship Endowment	\$1,000 annually. Application deadline: mid November	CRITERIA Speech and Mass Communication major, demonstrating a sincere interest in radio broadcasting. A minimum 3.00 GPA. Selection by Speech and Mass Communication Scholarship Committee. CONTACT Dr. S. J. Kim (301) 321-2889.	Dean's Scholarships		
Dean's Scholarships	\$500 (5) Application deadline: March 31	CRITERIA Full-time degree candidate student with at least 18 credit hours in major. Overall university GPA of at least 3.25. CONTACT Dr. S. J. Kim (301) 321-2889	Dean's Freshman Scholarships	\$500 Application deadline: March 1	CRITERIA Entering Freshman majoring in Biology, Chemistry, Physics, Mathematics, or Computer Science. Minimum GPA of 3.25 and combined SAT of at least 1100. CONTACT Dean's Office (301) 321-2121
Charles Evans Memorial Scholarship	\$500 annually. Application Deadline Date: April 1	CRITERIA Interest in real estate journalism CONTACT Dr. S. J. Kim (301) 321-2889	Dean's Merit Scholarships	\$500 Application deadline: March 1	CRITERIA Major in Biology, Chemistry, Physics, Mathematics, or Computer Science CONTACT Dean's Office (301) 321-2121
Forensics Scholarship	Amount varies annually Application deadline: May 1 and November 1	CRITERIA High school and/or college student, forensics experience, renewable to same student. CONTACT Dr. Brenda J. Logue (301) 321-2888	Dean's Recruitment Scholarships	\$500 Application deadline: April 14	CRITERIA Entering Freshman or transfer student with an Associate in Arts degree. Must intend to major in either Biology, Chemistry, Physics, Mathematics, or Computer Science. Freshman, minimum GPA of 3.25 and combined SAT of 1100; transfer student, minimum GPA of 3.50. CONTACT Dean's Office (301) 321-2121
Patrick J. O'Connell Memorial Scholarship	\$200 (could exceed) Application deadline: March 15 for Fall; October 15 for Spring	CRITERIA Mass Communication major with interest in Public Relations, Cinematography, or Journalism. Minimum 3.00 cumulative GPA. CONTACT Dr. S. J. Kim (301) 321-2889	Biological Sciences		
Public Relations Society of America Scholarship	To be announced; granted annually by the PRSA, Maryland Chapter.	CRITERIA Excellent academic record; commitment to public relations profession; campus involvement. CONTACT Dr. S. J. Kim (301) 321-2889	Compton Crook Award	Book of student's choice not to exceed \$50.	CRITERIA Biology major, 3.00 average in Biology, 2.75 overall average, completed 56 credits; student shall have distinguished academic performance, research, and/or service. Nomination by Biology faculty or officer of Biology student organization. CONTACT Biological Sciences Department (301) 321-3034
George F. Rogers, Jr. Memorial Scholarship	\$2,000 annually. Application deadline: April 1	CRITERIA Major GPA 3.25; overall GPA 3.00; major in Mass Communication CONTACT Dr. S. J. Kim (301) 321-2889	William B. Hathaway Outstanding Graduate Student Award	Book of student's choice not to exceed \$50	CRITERIA Fully admitted graduate student having completed 8 graduate credits. Nominees should exhibit an exemplary record as a graduate student in one or more of the following areas: scholarship, service, research. Nominated by a member of the graduate faculty of department of Biological Sciences. CONTACT Biological Sciences Department (301) 321-3034
Theatre			John David Horst Memorial Scholarship	\$25-\$50 Application deadline: early Spring	CRITERIA Completion of an Independent Research Project; must submit a written report and present a seminar. CONTACT Dr. Erik Scully (301) 321-3012
Dorothea Appel Theatre Humanitarian Award	Varies between \$50-\$100 By nomination	CRITERIA Student must be a Theatre major in excellent standing who embodies and generates humanistic values in artistic work. CONTACT Dr. Maravene Loeschke (301) 321-2786	James Moniodis Memorial Award	\$400-\$500 Application deadline: March 1	CRITERIA Biology student entering senior year with 3.00 GPA in Biology courses and 2.75 GPA overall. Participation in extra-curricular activities. CONTACT Dr. James Hull (301) 321-4117
Dean's Scholarships	\$50-\$500 Application deadline: April 15	CRITERIA 2.50 in all courses/3.00 in Theatre courses. Completed successfully two crew assignments for each three semesters matriculated. Must have contributed significantly to artistic efforts of the Department. CONTACT Theatre Department (301) 321-2786			

SCHOLARSHIPS AND AWARDS (Continued)

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
Biological Sciences (Continued)			Modern Languages		
Lois D. Odel Award	A Book	CRITERIA Senior standing, (88 credits completed), Biology major with 3.00 average in Biology and 2.75 overall; students nominated who have distinguished themselves through academic performance, research and/or service. Nomination by faculty or officers of Biology student organization. CONTACT Biological Sciences Department (301) 321-3034	Endowment for Latin American, Spanish and Portuguese Studies Scholarship and Don Miquel de Cervantes Scholarship	Tuition for one semester, number varies. Application deadline: May 1 for Fall; November 15 for Spring	CRITERIA Academic excellence and financial need CONTACT Dr. Jorge Giro (301) 321-2878
Computer and Information Sciences			Dr. Joseph Vidal-Liecha Memorial Scholarship	Approximately \$150 for tuition, room and board, books and fees. Application deadline: May for Fall; November 15 for Spring.	CRITERIA Sophomore or Junior based on talent and need majoring in French and/or Spanish CONTACT Dr. Jorge Giro (301) 321-2878
Mary Hudson Scarborough Award in Computer Sciences	A Book	CRITERIA Outstanding graduating Senior, voted by Computer and Information Sciences Department. Students are nominated by faculty. CONTACT Dr. John Dalphin (301) 321-3701	GRADUATE SCHOOL		
COLLEGE OF LIBERAL ARTS			Dean's Fellowships	Amount Varies. Application deadline: March 15 Fall & Spring, October 15 for Spring only	CRITERIA First-time graduate students, cumulative undergraduate GPA 3.65 and recommended by the coordinator of the graduate program they wish to enter. Returning graduate students must have completed at least 9 semester hours of graduate credits at TSU with GPA of 3.90 and must be recommended by coordinator of their graduate program. CONTACT Dean Michael Mark (301) 321-2078
English			Fulbright Scholarship for Graduate Study Abroad	Full expenses for one year of study abroad. About 700 nationwide.	CRITERIA U.S. citizen, B.A./B.S. by the beginning of the grant period (i.e., seniors apply in the fall for a grant to begin one full year later). Knowledge of language of the host country. Highly competitive, excellent academic record and a clearly defined proposal of study are needed. CONTACT Dr. Wayne C. McWilliams (301) 321-2912
Gerry Buettner Trust Award	Amount Varies No application	CRITERIA Outstanding graduating English major, faculty selects. CONTACT Dr. Dan Jones (301) 321-2869	SCHOOL OF BUSINESS		
Homeland Three Arts Club Awards	\$200 (2) Application deadline: March 30	CRITERIA Open competition. Outstanding achievement in Imaginative Writing; Junior or Senior. CONTACT Dr. David Bergman (301) 321-2938	C & P Telephone Scholarship	\$400 (4) Annually Application deadline: September 15	CRITERIA Excellent Grades, Extracurricular Activities Renewable to Same Student CONTACT Department Chairs
Towson State Undergraduate Prizes in Imaginative Writing	\$25 (2) Application deadline: March 30	CRITERIA Freshman or Sophomore for outstanding achievement in Imaginative Writing CONTACT Dr. David Bergman (301) 321-2938	Dean's Scholarships Freshmen	\$600 (4) Application deadline: March 1	CRITERIA Minimum SAT 1150, minimum high school average of a 3.25 CONTACT Mr. Barry Buchoff (301) 321-3228
HISTORY			Upperclassmen	\$500 (4) \$250 (10) Application deadline: March 15	CRITERIA Junior or Senior majoring in School of Business and Economics with a minimum 3.50 in major and overall GPA; transcript, resume, cover letter. CONTACT Mr. Barry Buchoff (301) 321-3228
Cecilius Calvert Chapter of Daughters of the American Colonists Award in American History	Medal of the Daughters of American Colonists No application	CRITERIA Outstanding graduating History major with an excellent GPA in American History courses. History faculty select the recipient and present the medal at graduation. CONTACT Ms. Mary Catherine Kahl (301) 321-2903	Accounting		
Disabled American Veterans Prize in History	Interest/dividends accruing annually from a \$10,000 endowment fund No application	CRITERIA Outstanding graduating History major with a minimum of 3.50 in major and 3.00 overall GPA. History faculty select the recipient and present prize at graduation. CONTACT Ms. Mary Catherine Kahl (301) 321-2903	Russell Denison Prize for Excellence in Accounting	Approximately \$100 awarded at graduation	CRITERIA Highest GPA; Full-time student CONTACT Accounting Department (301) 321-3226
Law Enforcement			Reznick Fedder & Silverman, CPA	\$1,000 scholarship and internship—I annually. Application deadline: November 15	CRITERIA Accounting major, Junior or Senior, 3.50 GPA or above. CONTACT Mr. Ray Castaldi (301) 321-3226 or Mr. Barry Buchoff (301) 321-3228
Maryland Law Enforcement Officers Scholarship	\$1,250 annually, not renewable to same student Application deadline: March 1	CRITERIA A Junior General Studies major with a concentration in Law Enforcement and 3.00 GPA. Planning to pursue a career in law enforcement, but not presently in a law enforcement position. In need of financial assistance. Applicant must prepare a one-page statement of career goals. The Towson State University Law Enforcement Advisory Committee will select the recipient. CONTACT Dr. John Toland (301) 321-2849			

SCHOLARSHIPS AND AWARDS (Continued)

SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT	SCHOLARSHIP/ AWARD	AMOUNT/ DEADLINE DATE	CRITERIA/CONTACT
Accounting (Continued)			Board of Trustees of the State Universities and Colleges Scholarship for Handicapped Students Special Need Scholarship	Amount Varies. Tuition & Fees. Application dead-line: Priority is given to applica-tions received by January 1.	CRITERIA The applicant must be an entering Freshman, a Maryland resi-dent, have a bonafide and verifiable handicap, satisfy TSU admissions re-quirements, have a high school GPA o-at least 3.00, submit an essay outlining his/her background and educational ca-reer goals. The scholarship will be re-newable if the student maintains a 2.75 GPA at TSU during the freshman year and a 3.00 GPA in subsequent semes-ters. CONTACT Office of Special Needs Margaret Warrington Handicap Student's Advisor (301) 321-2638
Sylvia Bernstein Prize for Excellence in Accounting	Approximately \$100 awarded at graduation	CRITERIA Highest GPA from College of Continuing Studies CONTACT Accounting Department (301) 321-3226			
Business Administration					
Joseph Keimig Business/Economics Scholarship	Amount Varies. Application dead-line: January 15	CRITERIA Sophomore, Junior, or Sen-ior with declared Business or Econom-ics with a minimum of 2.50 GPA and financial need. CONTACT Mr. Barry Buchoff (301) 321-3228	John J. Leidy Foundation Scholarships	Up to \$500 (Num-ber varies) Application dead-line: October 15	CRITERIA Undergraduate degree can-didate, Junior or Senior with at least a 3.00 GPA and 24 current credit hours at TSU and demonstrated need. Students are nominated by Department chair and selection is made by the University Scholarship Committee. CONTACT Carmel Hayden-Woelper (301) 321-3702
Towsontowne Business and Professional Women's Association Award	Approximately \$250 Application dead-line: January 15	CRITERIA Female, Junior or Senior, declared Business major and demon-strated need CONTACT Mr. Barry Buchoff (301) 321-3228			
Economics					
Wall Street Outstanding Achievement Award in Economics	1-year subscription to Wall Street Jour-nal and a Desk Set	CRITERIA Outstanding Senior and Economics major. Awarded at Gradua-tion CONTACT Economics Department (301) 321-2145	Charlotte W Newcombe Foundation Scholarship	50 to 65% of tu-ition (number var-ies) Application dead-line: April 25 for Fall; November 1 for Spring	CRITERIA Female, 25+ years, 3.00 av-erage, full-or part-time, officially admit-ted to TSU as undergraduate or graduate. Second degree candidates are eligible. An undergraduate must have 60 credits and demonstrate need. Re-newable to same student. CONTACT Women's Center Ms. Leah Schofield (301) 321-2666
UNIVERSITY-WIDE SCHOLARSHIPS					
CEEP Scholarship (Community Enrichment Partnership) Award	\$500-\$7,000 per year Application dead-line: Varies	CRITERIA U.S. citizen, Maryland resi-dent, black, in good academic standing (as defined by the university), willing to commit to at least 10 hours per week involvement in activities which benefit the Towson State community, prefera-bly full-time. CONTACT Dr. Camille Clay (301) 321-2051			
The Associated Italian American Charities of Maryland, Inc. Memorial Scholarship	\$1,000 annually. Application dead-line: March 30	CRITERIA U.S. citizen with Italian her-itage. Undergraduate or graduate. Fi-nancial need. At least a 3.00 GPA. CONTACT Carmel Hayden-Worlper (301) 321-3702	Marthe Quinotte Scholarship	Up to \$500. (Number varies) Application dead-line: October 1	CRITERIA Undergraduate degree can-didate, Junior or Senior with at least a 3.00 GPA and 24 current credit hours at TSU and demonstrated need. Students are nominated by department chair. Se-lection is made by the University Schol-arship Committee. CONTACT Carmel Hayden-Woelper (301) 321-3702

The University Curriculum

In keeping with the university's philosophy and goals, the curriculum is designed to provide experience in both the traditional arts and sciences and in specific programs for developing knowledge in fields meeting contemporary societal needs. The curriculum is generated by 29 academic departments, encompassing over 50 majors and concentrations leading to the Bachelor of Arts or Bachelor of Science degrees. These departments also maintain a large number of minor, certificate of proficiency, and specialized programs. Courses and programs within the university curriculum are approved by the university Senate and its appropriate committees, applying the strictest standards of academic excellence, accountability, and credibility. The university is proud to offer a curriculum of breadth and depth, conventional and experimental, offering courses of study as traditional as pre-Socratic philosophy or as contemporary as computer science.

BACKGROUND IN THE ARTS AND SCIENCES

All degree programs of the university are based upon a fundamental background in the arts and sciences. Work in five academic groupings, called the General University Requirements, is required of all students seeking the Bachelor of Science, Bachelor of Arts or Bachelor of Fine Arts degree (see General University Requirements of All Students).

CHOOSING A PROGRAM

Many students enter the university fully aware of their academic and occupational goals. Others have yet to discover a field or program of specialization. All students are urged to explore the range of those programs that interest them by (1) reviewing the listing of offerings and requirements in this *Catalog*, (2) consulting with an advisor in the Academic Advising Office, Dowell 2L, (3) exploring career opportunities and vocational interests through the Counseling Center, and (4) meeting with department chairpersons and faculty advisors in various fields of interest.

CHOOSING A MAJOR

A major in an academic field is earned by completing about 12 courses or about 36 credit hours of work, the exact number being set by the academic department. Three possible benefits make the pursuit of a major desirable: it prepares the student for graduate study in the field; it prevents random study that would result in a lack of competence in any branch of knowledge; it qualifies the graduate from the teacher education program to teach the subject in junior and senior high schools.

Students may select a major from among the following fields: accounting; art; art education; biology; business administration; computer science; chemistry; dance, early childhood education; general education; elementary education; economics; English; French; general studies (see listing of concentrations in Arts and Sciences section); General Arts and Sciences, geography; German; health science; history; international studies; Liberal Arts and Sciences; mass communication; mathematics; medical technology; music; music education; natural science; nursing; occupational therapy; philosophy; physical education; physics; political science; psychology; social science; sociology; Spanish; speech; speech pathology-audiology; theatre.

A concentration is a focused area of study of approximately 15-24 credits within the student's major which is formally recognized by the university and which may appear on the student's academic record.

A track is also a focused area of study within a student's major which is informally recognized by the university but may not appear on the student's academic record.

Students interested in a particular concentration within a major should contact the department for details.

DEGREE REQUIREMENTS

Bachelor of Arts Degree

A student who satisfactorily meets the following requirements will receive the Bachelor of Arts degree.

1. A minimum of 120 credit hours, which must include 32 credit hours of upper level work and meet the General University Requirements. (Course work taken at a two-year institution will not count as part of the 32 upper level credit hours required. Courses from a four-year institution will transfer as they were counted at the home (transfer) institution and may not be converted to an equivalent Towson number or level.)
2. Credit in the courses required of all students, of which English ENGL102 or its equivalent must be passed with a grade of "C" or higher.
3. Credit in the required courses of the curriculum the student has elected.
4. The completion of the intermediate courses, or the equivalent, in a foreign language.
5. Successful completion of a major. A grade of "C" or higher is required in all courses in the discipline and *applied toward the major or minor of that department*. If this standard is not attained, the student must repeat the course or substitute another course at the direction of the department.
6. A cumulative quality point average of at least 2.00.
7. Completion of the final 30 credit hours at the university unless permission is granted by the Academic Standards Committee to earn the credits at another institution.
8. Demonstration of personal qualities which are expected of an educated individual.
9. Filing with the Registrar a graduation application according to deadlines published in the Schedule of Courses Booklet.

The undergraduate records of all persons receiving a bachelor's degree are closed approximately six weeks after the official date of graduation. Any changes to the permanent record must be made by this date.

Bachelor of Science Degree

The requirements for a Bachelor of Science degree are identical to those for the Bachelor of Arts, with the exception that the Bachelor of Science degree does not require the completion of the intermediate courses in a foreign language.

Bachelor of Fine Arts Degree

The requirements for a Bachelor of Fine Arts Degree are identical to those for a Bachelor of Science Degree with the addition of the performance and studio requirements specified by the Dance Department. The Bachelor of Fine Arts Degree is available to students in the Dance Major.

MEETING REQUIREMENTS FOR GRADUATION

Students are responsible for meeting in full the requirements for graduation as set forth in the *University Undergraduate Catalog* at the time of matriculation as a degree candidate to the university. When the requirements are changed after a student has matriculated, the student has the option of meeting in full the graduation requirements in effect at the time of his or her initial matriculation as degree candidate, or the new requirements established after matriculation, provided that graduation occurs within seven years of the date of matriculation at Towson State.

A student who does not complete graduation requirements within seven years must meet the catalog requirements in effect for his or her graduating class. For example, a student who matriculated at the university in fall, 1980 would have until August, 1987 (seven years later) to graduate under the 1980-81 catalog. Any student who wishes to use another catalog should consult with an academic advisor and must petition and receive permission from the Academic Standards Committee to do so.

Changes in General University Requirements do not change departmental requirements or the requirements for state certification of teacher education students. Students should consult with their advisors if they have any questions regarding their degree programs. Students must fulfill both the General University Requirements and the departmental major requirements under the same catalog.

GENERAL UNIVERSITY REQUIREMENTS

Philosophy

General University Requirements at Towson State University are established to provide a liberal education. This liberal education core serves not merely to introduce students to a variety of disciplines, but to insure that they, regardless of the majors they have chosen, comprehend the four central branches of knowledge, their historical development, the interrelationships among them, and how each addresses the world, investigates, reaches conclusions, and presents findings. A basic liberal education is, in this sense, an understanding of the ways of knowing and modes of discourse in the fine arts, the humanities, the natural and mathematical sciences, and the social and behavioral sciences.

In addition to establishing breadth of understanding, the liberal education core also serves as the foundation from which students develop essential intellectual skills. While specific skills, such as those necessary for successful writing and speaking, may be the focus of particular courses, the more general development of skills is a cumulative process supported throughout the core; gathering and evaluating information, analyzing and interpreting, weighing alternatives, forming and expressing opinions and conclusions, appreciating diverse points of view, and moving comfortably in the realm of ideas and values.

Through developing these skills, students acquire abilities and concepts of lasting value in shaping their personal lives, developing their careers, meeting their responsibilities as citizens, and pursuing lifelong learning.

All students must gain basic experience in the arts and sciences by completing a distribution of at least 18 courses from five academic groupings.

Course Credit

General University Requirements must be fulfilled with courses carrying two or more credits (Group I, A, Physical Education, and Group II, three one-credit ensemble courses are the only exceptions).

Course Level

Prerequisites generally establish that most courses appropriate for fulfilling General University Requirements are offered at the 100 or 200 level. However, unless a *restriction of choice* is noted in Groups I-V below, students may choose courses at any level (100-400) to satisfy General University Requirements.

Exclusions

A course cannot be used to fulfill the requirements in more than one group of the General University Requirements.

Certain courses, by their design or specialized purpose, are not appropriate for fulfilling General University Requirements. Re-

quired remediation (English, Math, Reading), Internships, Practicums, Independent Study, Course Research, Directed Reading or Research, Travel Study, Seminars, and Thesis courses *cannot be used to fulfill General University Requirements*.

Completing Requirements

Students should plan to complete lower-level coursework meeting requirements during their first two years. They are urged to complete all requirements prior to application for graduation.

Group I: Required Skills

- A. *Field of Study:* Physical Education
Requirement: One credit hour of physical education skill activity course(s). A partial list of the courses which satisfy this requirement are listed in the Physical Education section.
- B. *Field of Study:* Basic Skills in Expository Writing
Requirement: A "C" grade or better in ENGL.102, College Writing or ENGL.190, Honors College Writing.
Entering freshmen and transfer students who have not completed college writing or its equivalent before formally matriculating as degree candidates at Towson State University *must* complete the College Writing course (ENGL.102) in residence at Towson State.
Under unusual circumstances, students may appeal to the Academic Standards Committee for an exception to this policy *before* they enroll in the course at another institution.
- C. *Field of Study:* Advanced Skills in Expository Writing
Requirement: A "C" grade or better in an advanced college writing course.

Approved Advanced Writing Courses:

ANTH.401	Anthropological Theory
ART.351	Writing About Art
BIOL.381	Biological Literature
DANC.321	History of the Dance
ECED.422	Writing Techniques for Teachers in ECED
ECON.323	Comparative Economic Systems
ECON.325	Economic Development
ECON.333	Economics of Poverty and Discrimination
EDUC.301	Writing and Communication Skills for Teachers
ENGL.313	Advanced Composition
ENGL.314	Writing About Literature
ENGL.315	Creativity and Style in Writing Non-Fiction
ENGL.317	Writing for Business And Industry
ENGL.318	Advanced Informational Writing
GEOG.299	Introduction to Source Materials and Research in GEOG
GEOG.329	Medical Geography
GEOG.371	Advanced Physical Geography
HLTH.402	Health Seminar
HIST.280-289	Topics in History
HIST.290	Introduction to Historical Study
ISTC.305	Writing Skills for Media Careers
MCOM.356	Feature Writing
MCOM.363	History of Film
MUSC.302	History of Music II

NURS.407	Nursing: Advanced Concepts and Issues
OCTH.430	Research Methods in OCTH
PHIL.460-469	Writing Seminar in Philosophical Studies
PHEC.302	Curriculum in PHEC
PHEC.305	Outdoor Education: Philosophy and Methods
PHEC.351	Philosophy of PHEC and Sport
PHEC.353	Sport and Society
PHEC.417	Organization and Administration of Athletic Training
PSYC.261	Experimental Psychology
SCED.345	Exceptional Learners in Secondary Schools
SOCI.354	Introduction to Criminal Justice
SOCI.381	Sociological Theory
SPPA.311	Technical Writing in SPPA
THEA.307	Theories of Theatre
WMST.333	Women's Words, Women's Lives
WRIT.312	History of Science
WRIT.354	Introduction to Criminal Justice
WRIT.361	Controversies in ANTH
WRIT.411	Organization Communications
WRIT.417	Topics in Writing

Group II: Fine and Performing Arts

Requirements: Two one-semester courses; each course must be from a different field of study.

Fields of Study:

Art (ART)
Dance (DANC)
Theatre Arts (THEA)
Music (MUSC)

Three 1 credit ensemble courses from the list below may be substituted for a Music course of 2 or more credits.

Approved Music Ensemble Courses:

MUSC.139-140	Guitar Ensemble
MUSC.141-142	Brass Ensemble
MUSC.145-146	Percussion Ensemble
MUSC.149-150	String Ensemble
MUSC.151-152	Voice Ensemble
MUSC.153-154	Woodwind Ensemble
MUSC.155-156	Clarinet Choir
MUSC.157-158	Jazz Ensemble
MUSC.159-160	Early Music Ensemble
MUSC.161-162	Chambers Singers
MUSC.165	Marching Band
MUSC.201	Opera Workshop
MUSC.257-258	Pep Band
MUSC.259-260	Choral Society
MUSC.261-262	University Chorale
MUSC.267-268	Orchestra
MUSC.269-270	Symphonic Band

Group III: Humanities

Requirements: Five one-semester courses; four of the five courses must be from different fields of study.

Fields of Study:

English (ENGL) Approved English Courses: (All courses except Freshman Writing equivalents and ENGL.313, 315, 317 and 318.)

History (HIST)
Interdisciplinary Studies

Approved Interdisciplinary Studies

Courses:

AMST.201	Introduction to American Studies
NURS.401	Concepts of Nursing III: Interdisciplinary Systems Approach to Health Care Delivery
WMST.231	Women in Perspective
WMST.332	Women's Culture and Creativity
WMST.335	Women, Work and Family
GENL.241	Introduction to Comparative Ethnic Studies
	Modern Languages
	Philosophy and Religion (PHIL)
	Speech/Speech Pathology and Audiology
	Approved Speech/Speech Pathology and Audiology Courses:
SPPA.105	Speech and Language Development
SPPA.205	Basic Sign Language
SPCH.131	Fundamentals of Speech

Group IV: Natural and Mathematical Sciences

Requirements: Three one-semester courses; each course must be from a different field of study.

Fields of Study:

Biology (BIOL)
Chemistry (CHEM)
Computer Science (COSC)
Mathematics (MATH)
Physical Science (PHSC)
Physics (PHYS)

Group V: Social and Behavioral Sciences/Personal Development

Requirements: Five one-semester courses; courses must be taken in five of the eight different fields of study.

Social and Behavioral Sciences:

1. Anthropology (ANTH)
2. Economics (ECON)
3. Geography (GEOG)
4. Political Science (POSC)
5. Psychology (PSYC)
6. Sociology (SOCI)

Personal Development

7. Health Science/Occupational Therapy
 - HLTH.007 Health Challenge for the 80's
 - HLTH.101 Current Health Problems
 - HLTH.207 Health Care in the U.S.
 - OCTH.103 Leisure & Health
8. Education/General Studies
 - EDUC.201 The Parenting Process
 - EDUC.401 Foundations of Education (2-3)
 - EDUC.407 Contemporary Issues in Education
 - GENL.103 Intro. to Human Relations
 - GENL.198 Philosophy of General Studies
 - GENL.251 The Creative Process

ALTERNATE GENERAL UNIVERSITY REQUIREMENTS (GURs) FOR JUNIOR TRANSFER STUDENTS

Only Maryland Community College Associate Degree Graduates are eligible for Option I of the Alternate GURs for Junior Transfer

Students. All courses under Option I or II must be completed at the transfer (home) institution(s) *before official enrollment at the University* and excludes any or all Towson State course work. Options I and II are valid seven years from formal admission/matriculation only. Students who exceed the seven-year statute of limitations will be required to comply with the GURs for native students. Both transfer options apply to newly enrolled students (first-time matriculants) only, *not* to current degree candidates or re-admitted students who previously attended TSU.

Option I

Maryland community college transfer students may satisfy all of Towson's GURs by presenting an AA degree from an articulated program, prior to official enrollment as a degree candidate of Towson State University, provided they have completed minimum distribution coursework in Groups II or III, IV, and V, College Writing with a grade of "C" or better (except CLEP), and a physical education skill activity course(s) at their accredited two-year transfer institution. However, the advanced college writing course must be completed in residence at Towson State University prior to graduation. Lists of approved articulated transfer programs are available at Maryland community college counseling centers and in the Admissions Office of Towson State University.

Option II

Transfer students, who have been awarded a minimum of 56 credits in transfer at the time of their original enrollment will be given credit for having met the General University Requirements provided all of the following requirements are met:

1. At the time of transfer, the student has taken the equivalent of College Writing (ENGL.102) and earned a grade of "C" or better.
Note: College Writing (ENGL.102) at Towson State University is equivalent to the second semester of a two semester composition course sequence. (CLEP-not transferable.)
2. At the time of transfer, the student has completed a total of one credit hour of physical education skill activity course(s).
3. At the time of transfer, the student has completed at least 45 credit hours or 17 courses in the Arts and Sciences. The student must have completed work in at least 11 fields of study from the native GURs Arts and Sciences.
4. At the time of transfer, the student has completed the following minimum course distribution requirements, with at least 2 credits completed in each course (the groups specified are the General University Requirement groupings required for native students at Towson State University).
1 course in a field of study from Group II.
2 courses, each from a different field of study, in Group III.
2 courses, each from a different field of study, in Group IV.
2 courses, each from a different field of study, in Group V.
5. Prior to graduation from the university, the advanced college writing course must be completed in residence at Towson.

TRANSFER STUDENTS WHO HAVE NOT COMPLETED THE GENERAL UNIVERSITY REQUIREMENTS UNDER OPTIONS I OR II AT THE TIME TRANSFER IS MADE WILL BE REQUIRED TO COMPLY WITH THE GENERAL UNIVERSITY REQUIREMENTS FOR NATIVE STUDENTS WHO ORIGINALLY BEGAN THEIR FORMAL STUDIES AT TOWSON STATE UNIVERSITY.

OPPORTUNITIES FOR OFF-CAMPUS STUDY

Study Abroad

Opportunities exist for students to earn academic credit toward their Towson State degrees while studying in another country.

Students may enroll in a program sponsored by an American college or university or may directly enroll in a foreign university. In order to receive transfer credit for study abroad, students must follow the proper procedure for obtaining university approval.

Students are encouraged to begin planning for study abroad as early as possible in order to select a program that is academically, financially, and linguistically appropriate. Planning guides and other resources are available at the International Student Service Office, Hawkins Hall 103-C, 321-2421. Towson State University is also a member of the International Student Exchange Program (see below).

International Student Exchange Program (ISEP)

Towson State University is a member of ISEP, the International Student Exchange Program, which offers Towson State students the opportunity to enroll directly in selected universities throughout the world at approximately the same cost as a year at Towson State plus transportation expenses. Most forms of financial aid can be applied.

For further information, contact the International Student Advisor at 321-2421, Hawkins Hall 103-C.

National Student Exchange

This program allows students an opportunity to become acquainted with social and educational patterns in other areas of the United States. Through Towson's membership in the NSE, students may attend one of the 60 participating schools for a semester or a full year. For further information, contact the Director of Registration and Records.

The Student Exchange Program

The Student Exchange Program at Towson State University is designed to foster an interchange of students among Towson State University, other state colleges of Maryland, and selected institutions of higher learning in the Baltimore Metropolitan area. Bowie, Coppin, Frostburg, Salisbury, Morgan State University, St. Mary's College, the University of Baltimore, the University of Maryland, Baltimore County, Goucher, Loyola, College of Notre Dame, and Johns Hopkins participate in the program. There are no additional costs to the student.

Students desiring information concerning the Student Exchange Program should consult with the Director of Registration and Records, who will provide information, applications, participating college bulletins, and class schedules.

MILITARY SCIENCE PROGRAMS

US Army Reserve Officers Training Corps (ROTC)

Towson State University offers Army ROTC to its students through a cooperative agreement among Loyola College, TSU, and the U.S. Army.

The primary objective of the Reserve Officer's Training Corps (ROTC) program is to prepare selected students with potential to serve as commissioned officers in one of the three components of the U.S. Army: Active Army, National Guard, and Army Reserve. The program is totally voluntary and is conducted in two phases—the basic course and the advanced course.

The basic course is taken in the freshmen and sophomore years. No military commitment is incurred during this time, and students may withdraw, as with any other course, through the end of the second year. The basic course is available as an elective to all qualified students. Subjects cover the areas of U.S. Army organization, management principles; national defense; military history; leadership development; and military courtesy, discipline and customs. Various adventure activities and military field train-

ing exercises are available in conjunction with the Military Science program. Uniforms, necessary textbooks, and materials are furnished without cost to the student.

TSU students who decide after either their freshman or sophomore years, that they are interested in the ROTC program may attend a special ROTC Basic Camp. This camp will fully substitute for the first 2 years of on-campus study. This camp is held for 6 weeks during the summer and all participants will receive pay and allowances.

Normally a student must have a minimum of 2 years of college remaining before graduation in order to join ROTC. However, on a case-by-case basis, students who will commit themselves to attending graduate school in order to meet the 2-year requirement may be permitted to enroll.

Except for veterans, the basic course or a basic camp must be successfully completed prior to entering the advanced course.

The advanced course is normally taken in the final two years of college. Instruction includes further leadership development, U.S. Army organization and management, administration, tactics, military structure, ethics, selected military technical skills and introduction to specific military career fields.

A paid, six-week advanced camp is held during the summer between the junior and senior years. This camp permits cadets to put into practice the principles and theories they have acquired in the classroom. It also exposes them to army life in a garrison and field environment. Additionally, there are optional training opportunities in such areas as Airborne (parachuting), Ranger school, Air Assault, Northern Warfare, and Russian language school.

All cadets in the advanced course receive uniforms, necessary military science textbooks, pay for the advanced camp, and a living allowance of \$100 per month up to \$1,000 each school year. The two-year program, previously described, is available to those students who have not taken Army ROTC during their first two years. Students can take advantage of this opportunity by successfully completing the paid six-week basic camp and enrolling in the ROTC advanced course in their last two years of college, provided they meet enrollment requirements. The requirements for and obligations incurred in the two- and four-year programs are the same.

Army ROTC graduates may serve three or four years, or an entire career on active duty, or request Reserve Forces duty (RFD) and serve as little as three months on active duty. The remainder of their obligation is spent in the Army Reserve or the Army National Guard where they assume roles equally important to those of their active duty counterparts.

Specialized branch assignments are made in the student's senior year which will determine the nature of his duties once he is commissioned. These specialized assignments are based largely upon the student's major field of study as well as his own personal preferences. The Army branch assignments include Adjutant General's Corps, Air Defense Artillery, Armor, Aviation, Chemical, Engineer, Field Artillery, Finance, Infantry, Military Intelligence, Military Police, Ordnance, Quartermaster, Signal, and Transportation. Special branches are available in the Chaplain, Judge Advocate General, Medical and Dental fields. Prior to graduation and commissioning, the senior student will also make known his personal preferences regarding the geographical area of the world in which he desires to serve his first tour upon entering the active army.

The Army awards scholarships on a competitive basis to outstanding young men and women who are interested in serving in the active or reserve components of the U.S. Army. Details of the ROTC scholarship program are given in the section on scholarships under Financial Aid. All TSU students are eligible to apply.

ROTC is designed to be challenging and demanding, yet rewarding and fun. Training is split between academic classroom subjects and practical field training exercises conducted at nearby

military installations. Cadets will be given the opportunity to learn many basic military skills, such as rifle marksmanship and field craft. However, the training emphasis is on leadership and your ability to plan and organize and follow-up on execution. No other college course gives you hands-on actual leadership experience. This training will last a lifetime.

Enrollment for ROTC is done through the Military Science Department at Loyola. Contact the Military Science Department at 532-5043 for class days and times. Generally, freshmen and sophomores taught at Towson have classes on Monday and Wednesday afternoons. Juniors and seniors attend classes at Loyola on Tuesdays and Thursday afternoons.

HONORS PROGRAMS

Honors College

The Honors College is composed of specifically designed courses, most of which fulfill the General University Requirements. For consideration, the student must have attained a 550 or better score on the mathematics or the verbal SAT examination or be in the top 10 percent of his or her high school graduating class. Matriculated students with a 3.20 or better GPA may also qualify for the Honors College. This program is essentially for, but not restricted to, first and second year students. Those who qualify may participate in the Honors College to the extent that they are interested. Any courses taken in the Honors College will be so designated on the student's transcript. A student who completes five or more honors courses will graduate as a participant in the Honors College.

Departmental Honors

The Departmental Honors Program is designed to provide the student with an intensive and individualized but directed education beyond the normal course of instruction. The Departmental Honors Program includes six to nine semester-hours credit in seminars, directed readings, and research projects. A senior thesis is required as well as an oral defense of the thesis. A candidate must also complete the Graduate Record Examination.

To be admitted to the program, a student must present a cumulative average of 3.25 and a 3.50 average in his or her discipline. These minimum averages must be maintained for graduation as a Departmental Honors Program participant. The student who completes an approved program will receive a diploma with the designation Bachelor of Arts or Bachelor of Science with Honors in the appropriate discipline. Currently, the departments of art, biological sciences, computer and information sciences, English, history, mathematics, modern languages, physical education, physics, psychology, and sociology and anthropology offer departmental honors programs. Details of each department's honors requirements may be obtained from the appropriate chair.

The Dean's List

Degree candidates are eligible for Dean's List recognition each fall and spring semester provided they complete a minimum of 12 semester hours credit and attain a 3.50 or higher quality point average.

Coursework must be in regularly graded courses which affect a student's grade point average. Pass grades, Audit and S/U grades do not apply toward the 12 credit minimum.

Graduation with Honors

To receive a bachelor's degree with honors, a student must have completed work at Towson State University with the following cumulative grade point average:

3.75 to 4.00 Summa Cum Laude
3.55 to 3.74 Magna Cum Laude
3.40 to 3.54 Cum Laude

Students must have, in addition, a 3.40 or better average for work completed at other institutions and a minimum of 56 semester hours of work at Towson State University.

Students who do not qualify for honors because of their overall QPA may petition the Academic Standards Committee if they meet the following criteria:

"A student who in his or her last 56 credits at Towson State University attained a cumulative average of 3.55 or higher."

The student who is approved for graduation honors by these criteria will receive Cum Laude honors from Towson State University.

Directed Independent Study

The Directed Independent Study Program at Towson State is designed for those students who wish to undertake college studies, but who are unable to attend classes on campus or who have learning styles that lend themselves to independent work. Courses offered are from the standard curriculum but do not require regular class attendance.

Procedure:

After registration, directed independent study students should contact the respective department chair for assignment of an instructor. It is the student's responsibility to contact his or her instructor.

Students will be given a course of study and work independently to achieve its objectives, meeting four times during the course with the professor. Study guides, textbooks and other materials appropriate to the course will assist the student in his or her course of study.

These courses are for degree credit and may be taken by anyone who has a high school diploma or equivalency and is capable of doing college work.

This program is not to be confused with courses listed in the College of Continuing Studies course schedule bulletin as "directed reading" or "independent study" which are advanced courses with variable content and credit.

Academic Regulations

Academic regulations are published in the *Catalog* and are applicable to all undergraduate students. If the university changes academic regulations they will be published in the next catalog and effective as of the date of publication, unless otherwise stated.

REGULATIONS GOVERNING ENROLLMENT

Registration

Each student is assigned a time to register. Students are not permitted to attend classes without having completed registration. A late registration fee is assessed for registering after the time assigned and within the late registration period. Students must discharge all financial obligations to the institution before being permitted to register.

Classification of Students

Students are classified according to the number of semester hours passed: freshmen, 0-24 semester hours; sophomores, 25-55 se-

mester hours; juniors, 56-89 semester hours; seniors, 90 semester hours or above.

Credit Hours

The unit of credit is the semester hour. It is defined as one 50-minute class per week (or its equivalent) for one semester. A three-hour class meets three 50-minute periods or two 75-minute periods a week for one semester. Laboratory and studio classes normally require two or three hours in class per week as the equivalent of one semester hour. Two hours of additional preparation are usually required for each hour spent in class.

Semester of Study

Each semester a student registers and has not cancelled or withdrawn prior to the first day of class counts as a semester of study. Verified withdrawal for medical reasons or entry into the Armed Forces will not count as a semester of study.

Those students withdrawing from the university who intend to return must comply with the deadlines established for readmission. Final deadlines for submission of the request for readmission are August 1 for the fall semester and December 15 for the spring semester.

Attendance

STUDENTS ARE EXPECTED TO ATTEND ALL CLASSES. Each faculty member sets the policy on absences. Policies vary, and it is the responsibility of the student to understand clearly the absence policy of each instructor and to act accordingly. Students are expected to notify the health center and instructors by phone or in writing of any absence exceeding three days.

Student Load

The normal student load is 15-18 credit hours in each regular term (spring, fall). Students may register for a maximum of *three credit hours* for the Minimester and a maximum of *15 credit hours* for all summer sessions but not more than *9 credit hours* in any one session.

Students in good academic standing may take up to 19 credit hours. Students must possess a minimum cumulative average of 2.00 to take 18 credit hours and a cumulative average of 2.50 to take 19 credit hours.

Students possessing a minimum 3.25 cumulative average, based on at least 30 quality hours taken at Towson State University, may carry 20 credit hours. In the last semester of the senior year, students may carry 20 credit hours provided that number of credits is needed in order to graduate and provided their cumulative average is at least 2.50.

Students possessing a minimum 3.50 cumulative average or better, based on at least 30 quality hours taken at Towson State University, may carry 21 credit hours.

Students wishing to take more than 19 credit hours must petition the Academic Standards Committee *prior* to the registration period and will not be permitted to register for an excessive number of credit hours without *written* permission from the Committee.

Auditing Courses

Students may elect to audit a course with the written permission of the instructor. The option to audit a course may *only* be made during the change of schedule period each semester. Students paying fulltime tuition and fees are not charged additionally for auditing. For other students, tuition and fees vary according to the credit value of the course (e.g., 3 credits = 3 × tuition rate per credit hour + appropriate fees).

Students are advised that audited courses:

1. do not count as part of the semester's credit hour load;
2. do not count as credit toward graduation unless repeated later for credit;
3. will appear on the transcript as an "AU";
4. will appear on the transcript as "AUX", if students register for a course as an audit and fail to attend.
5. may not be used to repeat a course for which credit has already been earned.

Change of Course Schedule/Course Withdrawal

All changes in a student's schedule of courses (adding or dropping a course or a change in sections or credits) are valid only if the student completes the Course Schedule Change Form and files it with the Registrar. Failure to do so will result in a grade of "F" or "FX" in the course not dropped and no credit in the course added. The grade will appear on the grade roster of the course and the student's permanent record.

No student may enter a class after the expiration of the change of schedule period contained in the academic calendar. Exceptions to this will be considered only after approval of the department chair of the course involved and the dean of the particular college or school.

Students dropping a course within the change of schedule period will have no grade recorded.

Students dropping a course after the change of schedule period, but within the period to drop with the grade of "W," will have only the "W" grade recorded on the permanent record.

Students who do not officially drop a course during the established time periods will receive the grade earned in the course (A, B, C, D, F) as determined by the instructor.

Students with *documented* medical problems or *verified* circumstances beyond their control may petition the Academic Standards Committee, in care of the Registrar, to drop a course after the established deadline and receive a grade of "W." Documentation must accompany the petition. If the petition is approved, grades of "W" will be recorded for all unearned grades (FX). Earned grades (A, B, C, D, F) will not be changed.

The Academic Standards Committee does not consider failure to receive a grade in a course by the last day to drop the course with a "W," or the receipt of a low or failing grade in a course, as justifiable reasons for withdrawing from a course after the established deadline.

University Withdrawal/Cancellation

A. Withdrawal

A degree candidate wishing to withdraw from the university should obtain a withdrawal form from the office of Academic Advising, Dowell 2L. Before the withdrawal is official, the student must submit the completed withdrawal form to the office of Academic Advising. In the case of a newly admitted degree candidate, withdrawal is appropriate only if the student has attended at least one day of classes; otherwise, the student follows the cancellation procedure.

A student who withdraws subsequent to the last day to drop a course will be assigned the grade of "F" or "FX" unless withdrawal is for medical reasons or other extenuating circumstances. If withdrawal is for medical reasons and is so documented, a grade of "W" will be recorded for all unearned grades (FX). If withdrawal is for extenuating circumstances and can be documented, an appeal should be addressed to the Academic Standards Committee.

B. Cancellation

Newly admitted undergraduate students who make a decision not to attend the university prior to the first day of classes of the

semester for which admission was approved should notify the Admissions Office in writing. The student's admissions file will accordingly be cancelled and the student will be required to submit an additional application for any future entrance date.

Procedure for Readmission

A student who has officially withdrawn in good standing from the university may apply for readmission through the Office of the Registrar. Forms are available in room 236 of the Administration Building. The deadline for readmission is August 1 for the fall semester and December 1 for the spring semester.

Readmitted students must comply with General University Requirements that were stated in the *Catalog* at the time that they were originally admitted to Towson State. Hence, these students do *not* qualify for any of the transfer options.

Students who have been dismissed or who officially withdraw must comply with competency standards in effect at time of readmission if the standards were not met prior to dismissal/withdrawal.

Repeating Courses

Students may repeat a course **only once** where credit has been earned or a mark of "F" or "FX" has been awarded, except by **prior** approval of the Academic Standards Committee. The Committee will not consider a petition unless the student possesses a Quality Point Average of 2.00 or higher without counting the repeated course(s) being petitioned. Grades of "W" are administrative grades and are *not* considered to be part of the repeated course procedure.

When a course is repeated, the student will receive credit for the course counted only once. Only the higher of the two grades will be calculated into the student's Quality Point Average. The lower grade will remain on the record with the letter "R" preceding (e.g., RF; RX; RD, etc. to indicate that the course has been repeated.) Upon completion of the repeated course, the student must submit a "Repeated Course Form" to the Registrar's Office in order to bring about these adjustments to the record.

Low or failing grades received in courses taken at Towson State *must* be repeated at Towson State in order for the QPA to be recalculated. Grades earned at other institutions do not replace grades earned at Towson State or alter a student's QPA.

Pass/D/F Option

Students may elect 12 hours toward their degree for which they may be graded on a Pass/D/F basis. If a student registers for more than six semester hours on Pass Option in one semester, only six may be counted toward graduation. This option is *not* available for courses required for a major or for certification in teacher education unless special permission is obtained from the department concerned. A student must make all declarations or changes to the option before the end of the change of schedule period which is the first six days of classes for each fall and spring semester. See calendars for Minimester and Summer Sessions for specific deadlines.

Special Format Courses

Directed readings, independent study, and colloquia are special format courses. A student may not apply more than 12 credit hours of these special format courses toward graduation. Departments may set limits for fewer credit hours, but they may not exceed the maximum of 12 credit hours set by the University Curriculum Committee. Because of the concentrated nature of these courses, students should be advised to take no more than 6 hours of upper division special format courses per semester.

REGULATIONS GOVERNING ACADEMIC STANDARDS

Academic Standards are set to insure that a degree from Towson signifies student work meeting or exceeding a particular level of excellence.

Academic Progress and Good Standing

In order to remain in the university, a student must possess the cumulative point averages indicated below.

REQUIRED MINIMUM QUALITY POINT AVERAGE TO BE IN COLLEGE

Credits Attempted (Includes Towson credits and accepted transfer credits)	Minimum QPA
1-19	1.10
20-29	1.50
30-39	1.65
40-49	1.80
50-55	1.90
56 and above	2.00

Students who fall below the level required for good academic standing will no longer be subject to immediate academic dismissal but will first pass through the following stages:

1. **Academic Warning:** Degree candidates who fail to attain the minimum quality point average required, according to the above chart, receive an academic warning and must receive additional academic advising. They must attain good standing by the end of the next semester of attendance. No notice of academic warning is placed on the record.
2. **Academic Suspension:** Students failing to attain good standing at the end of any semester following academic warning are academically suspended and may not attend the University for one semester and the intervening summer/Minimester session. They are also discouraged from attending other institutions during this period. Work remaining to resolve any Incomplete grades, however, may be completed during this time. A notice of academic suspension will be placed on the record.
3. **Academic Probation:** After the suspension ends, students may be readmitted on academic probation for a maximum of one calendar year, during which time they must enroll in a minimum of six credits in each semester and may enroll in a maximum of 13 credits (or a maximum of 15 credits with approval of the Director of Academic Advising). They must also receive additional advising during this period and may not register without written clearance from an advising body. A notice of academic probation will appear on the record.

Students failing to attain good standing by the end of the probationary period will be academically dismissed. These students may not attend the University in any capacity, except in cases where extraordinary circumstances apply. Those cases will be reviewed by the Academic Standards Committee.

Procedures for Reinstatement

A student who is no longer in good standing may petition for reinstatement by completing by the established deadlines the readmission application available in the Registrar's Office. Deadlines for readmission are August 1 for the fall semester, December 1 for the spring semester.

A student petitioning for readmission must bring the QPA to the minimum required to be in good standing as outlined in Standards for Academic Good Standing. In addition, a student must attain a minimum QPA of 2.00 in all work taken during the period of academic dismissal.

In evaluating requests for reinstatement in which a student has not attained the required QPA for readmission at Towson State, the Academic Standards Committee will consider evidence of a student's personal growth and/or academic performance at other institutions.

Normal Progress and Maximum Length of Attendance

It is expected that a student will attain 120 semester hours of credit and complete graduation requirements in eight semesters of study, allowing an average credit load of 15 hours per semester. A student will be permitted a maximum of 10 semesters of study, allowing an average credit load of 12 hours per semester.

The number of semesters of study for transfer students will be determined by dividing the number of credits transferred by 15, rounding the answer to the nearest lower whole number. For example, a student transferring 33 hours will be considered to have completed two semesters of study.

Grading System Effective September 1976

Grade	Quality Points Per Credit Hour
A Superior	4
B Good	3
C Satisfactory	2
D Less than satisfactory but allowable for credit, subject to the restriction specified under Degree requirement	1
F Unsatisfactory (no credit)	0
FX Non-attendance or failure to withdraw (no credit)	0
S Satisfactory Not used in QPA calculation	0
U Unsatisfactory (no credit) Not used in QPA calculation	0
I Incomplete (no credit) Not used in QPA calculation	0
PS Passed (course taken under PS/D/F option) Not used in QPA calculation	0
PE Passed by examination Not used in QPA calculation	0
AU Audit (no credit) Not used in QPA calculation	0
AUX Audit (no credit) Failure to attend, not used in QPA calculation Grades of PS, PE and S are equivalent to a grade of C or higher.	0

Quality Point Averages

The semester Quality Point Average is computed in a three part process.* First, multiply the hours in a course by the quality points assigned to the grade earned in the course. Then, total the hours for all courses taken in the semester. Finally, divide the total number of quality points by the total number of hours to find the QPA.

*Using only courses in which grades of "A," "B," "C," "D," "F," or "FX" were awarded.

Grades of "I," "PS," "PE," "W," "S," "AU" and "U" are not used in computation of averages.

For example:

4 hours of A	(4 points each)	.....	16 points
4 hours of B	(3 points each)	.....	12 points
3 hours of C	(2 points each)	.....	6 points
3 hours of D	(1 point each)	.....	3 points
2 hours of F	(No Credit Given)	.....	0 points
2 hours of FX	(No Credit Given)	.....	0 points

18 Total hours attempted

37 Total points

Dividing 37 by 18, the student's QPA for this semester is found to be 2.05.

The student's cumulative QPA is found by dividing the total quality points earned in all courses completed at Towson by the total number of credit hours attempted at Towson (excluding from the computation those credit hours attempted during the period September 1, 1973 to August 31, 1976 for which the grade of "NC" was assigned). For example a junior has attempted 76 credit hours and has earned a total 190 quality points. His cumulative Quality Point Average is 2.50.

The grades of "S" and "U" (satisfactory and unsatisfactory) are used primarily in those courses offered for skill development and other courses that have been recommended by the academic departments and approved by the Academic Standards Committee. The grade of "S" represents that work of "C" or higher has been accomplished and that the student has attained a level of competence sufficient to advance to the next course. A grade of "U" is given to students whose work represents "D" or "F" quality. "S" and "U" grades are not calculated in a student's QPA.

A grade of "PS" (Pass) is assigned to a course selected on the pass option when the student receives a grade of "A," "B," or "C." The student electing the pass option who receives a grade of "D" or "F" will have the "D" or "F" recorded on the permanent record and used in the calculation of the QPA.

A grade of "PE" is assigned to those courses passed under the credit for experience or prior learning option. All grades are recorded on the student's permanent record but not calculated in a student's QPA.

A grade of "I" (Incomplete) may be given by the instructor if a student is unable to complete the work required in the course because of *verifiable* medical reasons or *documented* circumstances beyond the control of the student. No credit is given for an incomplete grade until a regular grade is assigned by the instructor. Incompletes are not counted in the student's attempted hours or calculated in the QPA.

It is the responsibility of the student to complete the work required in order for the Incomplete to be converted to a regular grade. Instructors may specify the time by which the work required is due in order to remove the Incomplete. Any Incomplete grade, however, that is not completed by the end of the next full semester of study, excluding summer and January sessions, is automatically converted to an "F" grade, and is calculated in a student's attempted hours and QPA.

Students who are granted an Incomplete should *not* re-register for the course. The work required must be satisfactorily completed by the last day of the next regular semester, or by the date specified by the instructor, or the Incomplete grade will be converted to an "F" grade.

The grade of "FX" is an administrative grade and is calculated in a student's QPA. A grade of "FX" is given to those students who never attend the course or who stop attending during the semester without officially withdrawing. (If a student has officially withdrawn, a grade of "W" will appear on the final class roster.) When a student attends most of the classes but misses the final examination without a legitimate excuse, the student will receive a "zero" or "F" grade for the final examination and have that value

or grade calculated with other grades earned during the semester to determine the final course grade.

Grade changes, excluding "I" grades and repeated courses, must be made within one year. After one year, requests for grade changes may be made only for verifiable medical reasons and by petition to the Academic Standards Committee.

Unsuccessful Semester

For verifiable medical reasons or documented, extraordinary circumstances, a student may petition the Academic Standards Committee for an unsuccessful semester. If the request is granted, the courses taken during the unsuccessful semester will still remain on the official transcript together with the grades originally recorded. However, none of the courses will count towards graduation and the grades will not be calculated in the student's academic totals.

The following guidelines regulate the Academic Standards Committee's declaration of an unsuccessful semester:

Five years must have elapsed between the semester in question and the date of the appeal.

A student must have successfully completed two semesters of full-time work (i.e., 24 credit hours), or the equivalent at Towson State University. This work must show a marked improvement over the work during a semester in question.

Transcripts of Academic Records

The office of the Registrar can normally process a transcript request within 72 hours except during periods of high demand at the end of each semester. During these periods, transcript requests may take longer to process. A fee of \$3 will be assessed for each request. Rush transcripts, mailed the same day as the request, will be charged a \$5 fee.

A student with an outstanding debt to the institution is not eligible to receive a transcript of record.

REGULATIONS GOVERNING CURRICULAR AND PROGRAM REQUIREMENTS

Degree Requirements

Degree requirements are those outlined in the Curriculum section of this *Catalog*.

General University Requirements

General University Requirements are those outlined under Curriculum.

Graduation With Honors

Requirements for graduation with honors are those outlined under Curriculum.

Meeting Requirements by Examination

A student can earn credit for prior learning (not prior course work) through examination by an academic department. The following departments offer credit by examination in some courses meeting General University and major requirements: biology, chemistry, economics, English, health science, history, mathematics, physical education, and psychology.

CLEP examinations (college level examination program) are offered in accounting, biology, business administration, English, psychology, and sociology. For more specific information about the examinations, contact the Credit For Prior Learning Program coordinator, 321-2023.

A student can also obtain credit for prior learning by departmental evaluation. For information about earning credit by this method, contact the individual departments.

Credit for Transfer Work

For additional information, see the admissions section of this *Catalog*.

Policies Pertaining to Transfer Credit:

1. Only the courses and credits completed at other institutions are transferrable to Towson State. Grades and quality point averages earned at other institutions are not transferrable. Courses must correspond to programs offered at Towson State.
2. Credit is accepted by Towson State for a course completed at any regionally accredited college or university. This credit will count towards graduation but will *not* be used in calculating the academic average required for graduation. Credits will transfer to Towson State as they were taken at the host institution. For example, if a student completes a 200-level course at the host institution and transfers it to TSU, the course will transfer as 200-level—even if the course's equivalent at TSU is 300 or 400-level.

3. Courses in which a grade of "D" or higher has been earned in accredited Maryland institutions are transferrable. However, credits in which a "D" grade was earned and transferred to Towson State cannot be applied to a major program. A grade of "C" or higher is required for major credit. Students must repeat any course previously transferred with a grade of "D" in order to meet major requirements. The number of credits repeated will increase the number of credits needed to fulfill graduation requirements.

For example, if a three credit course which transferred to Towson State University with a grade of "D" is repeated at Towson State, a student must earn a minimum of 123 credit hours to be eligible for graduation.

4. Course work in which a grade of "F" has been earned at TSU may not be repeated at other institutions for the purpose of increasing the quality point average at TSU, since only the credits earned in courses at other institutions are transferable—not the quality points or average.

Courses which have been accepted previously for transfer credit at TSU or which have been completed for credit at TSU may not be repeated at other institutions. For example, a student may not fail a course at TSU, repeat it at another college, and expect the course to transfer to the University. Moreover, a student who has already transferred a course to TSU cannot repeat it elsewhere in hopes of earning a higher grade and have the higher grade transfer to Towson State. (See "Repeated Course Policy" heading under Academic Regulations in this *Catalog*.)

5. Students who have earned 64 or more total credits (including any transfer credits) may *not* take courses at any community college for the purpose of transferring the credits earned toward a degree from Towson State.
6. Students with fewer than 90 total credits may take courses at any accredited four-year institution, for the purpose of transfer, if permission is granted *in advance* by the Academic Standards Committee.
7. Students may *not* take courses at other institutions if they are within the last 30 credits required for a degree from Towson State. A student may petition the Academic Standards Committee, in care of the Registrar, for an exception to this policy. Such petitions must be presented *before* the student takes any course at another institution. Exceptions are granted only in cases of extraordinary circumstances.

Students seeking an exception for courses required of the major program *must* include with the petition form a brief note from the department chair supporting the request and accepting the course and credits towards the major.

8. Towson State students who wish to take courses at other accredited institutions with the purpose of applying those credits toward a degree at Towson State must complete a Petition to Transfer Credit Form available in the registrar's office. The petition requires the signature of a major department and/or the department in which the course(s) is (are) offered at Towson State. Petitions must be completed and returned to the registrar's office *before* the course is taken at another institution.
9. Entering freshmen and transfer students who have not completed college writing or its equivalent before formally matriculating as degree candidates at Towson State University *must* complete the College Writing course (ENGL.102) in residence at Towson State. Under unusual circumstances, students may appeal to the Academic Standards Committee for an exception to this policy *before* they enroll in the course at another institution.
10. No Advanced Skills in Expository Writing (Second Writing) course may be transferred from a two-year institution and applied toward fulfilling the university's requirement for Group I-C of the 1985 General University Requirements or Group IV-C of the pre-1985 GURs. Writing courses taken at a four-year accredited institution may be considered as meeting this requirement upon petition for evaluation by the appropriate academic department and where necessary, by TSU's English Department. Petitions are initiated through the Academic Standards Committee c/o Registrar's Office.

Student Services Programs

Student services programs aid students in meeting university goals. The services described below are offered at no charge to students, although the availability of some services varies according to the demand for them. The university will also assist students in obtaining services off-campus, but, in that case, the costs must be paid by the students.

ADVISING

Towson State University is committed to providing comprehensive advising designed to enrich the educational experiences of every student. Accordingly, all students are required to seek appropriate advising each semester prior to registering. Students who have chosen a major are urged to visit the appropriate department as early as possible in order to complete a "declaration of major" form and to request assignment to a departmental advisor. Students who have not yet chosen a major are assigned to an advisor through the College of Liberal Arts.

In addition, the following offices exist to help students with their advising needs:

Center for Advising and Orientation

Dowell Hall, 2nd Level, (301) 321-2309, 321-2472

The Center for Advising and Orientation provides general advising for full-time undergraduate students and functions as a clearinghouse for information about the university's policies, procedures, and requirements. While the center specializes in serving large numbers of students through its various group programs, it also assists individuals with setting academic goals, selecting courses, meeting standards, and reviewing progress toward the completion of general university requirements.

Students who are new to the university attend a TRIAD program

in July, August, or January, before they begin their first semester. TRIAD initiates students' transition to TSU by helping them to interpret policies, requirements, and standards; to select courses and plan schedules; and to register for classes. The program also helps new students to understand the freedoms and responsibilities they will assume at TSU and it explains the resources and facilities that the university provides for them. The emphasis is on enabling the students to make well-informed decisions about their own education. The orientation office also conducts programs for students' families and directs a wilderness challenge course for new students. In addition this office publishes *Compass: The TSU Student Handbook*, the *TSU Family Handbook*, and the *Family Newsletter*.

Students who wish to review their fulfillment of the general requirements may rely on the center's advising office. Students may also obtain the latest information about forms, procedures, and regulations. The advising office provides special assistance for students who are having difficulty maintaining academic good standing. The Academic Advising Office advises students who are withdrawing from the University as well as students whose health necessitates a complete separation from the university or a reduction in course load. This office conducts a "junior audit" to inform students about requirements they have remaining to fulfill after they have completed 80-90 credits.

College of Continuing Studies

Administration, Room 223 (301-321-2471)

The College advising unit, serving the part-time, adult, evening and weekend degree candidate, as well as the non-degree and lifelong learning student, offers comprehensive one-stop advising. Academic advisors are available daily Monday through Thursday from 9:00 a.m. to 9:30 p.m., and Friday from 9:00 a.m. to 5:00 p.m. when school is in session. In addition, limited Saturday hours are available during fall and spring semesters.

"Open Advising" days are held during the year on the third Thursday of every month. In January and August only, one full week and all Thursdays of the month will be designated for open advising, wherein advisors will be available on a first-come, first-served basis to accommodate students who need immediate answers to questions regarding scheduling, registration, or student status. Telephone advising is also available during selected hours.

Individual and group advising sessions may be scheduled by appointment throughout the semester. Persons wishing advising or consultation are urged to call 321-2471 well in advance for an appointment.

CAREER PLACEMENT

Career Placement Center

University Union, Room 217, (301) 321-2233

Hours: M-F, 8:30 a.m. - 4:30 p.m.

Open Wed. until 7:00 p.m. during Fall and Spring semesters

The placement staff assists Towson State University students with their preparation and search for meaningful and satisfying careers. Services provided by the staff include:

- Credential service and Placement Handbook*
- On-campus interviewing and recruiting by employers*
- Job mailer subscription*
- Resume file*
- Postings of full-time degree and non-degree employment
- Seminars and workshops pertaining to job search, resume writing, and interview techniques

On-campus career awareness programs in conjunction with academic departments and student organizations

Individual advising regarding employment and careers

Library and resource room containing directories, employer information, career literature, audio and video tapes, handout materials, job listings, and graduate school catalogs.

*Indicates services for seniors, graduate students, and alumni registered with the career placement center. There is a \$4.00 registration fee to establish a credential file and to cover the cost of providing four copies of the file to employers or graduate schools of the student's choice.

All other services and programs for undergraduates are free of charge and open to everyone.

Part-Time Jobs Office

University Union, Room 217, (301) 321-2730

PTJ is a program designed to assist Towson State students in obtaining part-time and summer employment while attending the university. Through PTJ, students can find jobs that will provide them with valuable work experience and supplement their incomes.

The PTJ office is located in the career placement center. It is open year round and is an Equal Opportunity Referral Service.

COMPUTING SERVICE

Cook Library, Ground Floor, (301) 321-3916

Computer support for instruction and research is provided by the Academic Computing Service. This modern, growing facility operates a VAXcluster, consisting of a DEC VAX 11/785 and a new state-of-the-art DEC VAX 8700 computer. Operating independently of the VAXcluster, but networked with it, is a DEC microVAX II computer, which also serves as a graphics workstation, thereby affording faculty and students the capability of working with state-of-the-art graphics. By the summer of 1988, the two major campus computing centers will be linked by a fiber-optic "spine," which will ultimately give us the capability of networking all major buildings via local ethernet, linked to the Academic Computing Center.

The center includes an open Laboratory providing on-line terminals and printers for students and faculty, a demonstration classroom, and microcomputer facilities. Additional terminals are distributed in satellite centers in Smith, Psychology, Linthicum, and Hawkins Halls, and units in instructional departments for classroom and laboratory use. Available VAX software now includes ADA, APL, BMDP, C, C-CALC (spreadsheet), KERMITE, LISP, MINITAB, ORACLE (data base management), PASCAL, SPSSX, SPSSX-GRAPHICS, and SYMAP, as well as all the standard languages and various instructional packages.

COUNSELING

Counseling Center

Counseling Center, (301) 321-2512

The counseling center, a service available to students, faculty, and staff, provides a variety of developmental experiences for groups or individuals who are interested in refining their living skills. In addition, the center's professional staff offers help with personal, social, and career-related problems. Interested persons are invited to call for an appointment or drop by the center. All counseling center services are confidential and conducted in private.

In cooperation with college media services, the counseling center sponsors COPE-LINE, a telephone tape system designed to help callers deal with the stresses and strains of day to day living. This system includes a wide variety of subjects: life skills, sexuality, careers, health concerns, consumer information, and other topics

which may be of interest to members of the Towson State Community. Maryland Legal Line, a service of the Maryland Bar Association, is also part of COPE-LINE. This service provides legal information covering a wide range of topics. COPE-LINE is a free service available to all the citizens of the State of Maryland through its 800 number which is 1-800-638-8862. A directory for COPE-LINE may be obtained at the counseling center or by calling 321-COPE.

DISCOVER, a computer assisted career guidance system designed to assist students in career choice, is also available at the counseling center. This system provides the opportunity to: (1) identify occupations by assessing interests, abilities, and values; (2) gather information about more than 400 occupations; (3) obtain information about four-year colleges in the United States.

Mental Health

Health Center, (301) 321-2466, 321-2469

Free psychiatric services are available to all students, faculty and staff, at the campus health center.

Use of the mental health service is entirely confidential. Students may drop in at the health center, or arrange appointments by telephone or through the counseling center. In addition, the mental health service is available to various groups on campus as they address mental health concerns. Students who wish to have psychiatric collaboration or participate in these activities are encouraged to contact the director of the mental health service at the health center.

DEVELOPMENTAL PROGRAMS

The developmental courses are designed to remediate deficiencies in basic skills. Students whose entering competency test scores indicate they need additional preparation to meet the standards of college-level courses are required to complete the appropriate developmental courses prior to their third regular semester in order to continue attending the institution as degree candidates. These courses will not count toward the 120 credits required for graduation. Certain foreign-born students are required to complete courses in English as a Second Language as a prerequisite to enrollment in ENGL.102, College Writing. (See "Undergraduate Admissions.")

HEALTH SERVICES

Health Center

Dowell, 1st Floor, (301) 321-2466

The Anita S. Dowell Health Center has a professional staff of physicians, non-physician practitioners, nurses and a health educator. The Health Center is open with a nurse on duty weekdays from 7:30 a.m. to 8 p.m. Patients are seen on an appointment or drop-in basis during daytime office hours. Reproductive health seminars are held twice weekly.

The Health Center provides primary care for common acute conditions and stable chronic disease, with referral of serious emergencies or illness to local hospitals or family physicians. Preventive care and health maintenance, including blood pressure screening, allergy shots, GYN services such as birth control, pregnancy testing and PAP smears are also provided. The students' right to privacy is strictly maintained. (See the Health Center Booklet distributed to all new students for more detailed information on available services.)

A completed medical history is required for all students using the Health Center. All entering students are strongly encouraged to provide their immunization records including proof of immunity to measles, mumps, and rubella.

Students are responsible for the costs of referrals, hospitaliza-

tions, x-rays, and any diagnostic tests not provided at the Health Center. The university does not assume financial responsibility for any injury incurred on the athletic field or in any physical education class.

A student who has a physical condition which prevents complete participation in the regular physical education program may be permitted, upon authorization of the university physician and the Academic Standards Committee, to take an adapted program or to be exempt from physical education requirements.

Speech-Language-Hearing Clinic

Van Bokkelen Hall, Room 001, (301) 321-3095

Diagnostic and therapeutic services of the speech-language-hearing clinic are available, without charge, to all members of the Towson State faculty, staff, student body, and dependents. Speech, hearing, and language evaluations for all ages and all types of communicative disorders are available. Audiological services include complete hearing testing and hearing aid evaluations. Appointments can be made by phoning the above extension.

Therapeutic services are provided for children and adults experiencing difficulty in comprehending and using oral communication. Treatment is provided for the following types of communication disorders: language, articulation, cleft palate, stuttering, hard of hearing, voice, foreign dialect, aphasia, laryngectomy.

Sickness and Accident Insurance

The university offers students the opportunity for year-round health and accident coverage at a nominal fee. All Resident students are required (and all others are encouraged) to obtain adequate coverage.

The premium for coverage begins at \$161.

Additional information is contained in the insurance brochure available at orientation and registration.

INTERCOLLEGIATE ATHLETICS

With the motto "Athletic Excellence With Integrity," Towson State University is committed to a comprehensive intercollegiate athletic program for men and women as an integral part of the student's total educational experience. The men's program, which numbers 11 varsity sports, enjoys Division I membership in the National Collegiate Athletic Association, the East Coast Conference (ECC), and the Eastern College Athletic Conference. The Tigers field men's varsity teams in football, soccer, cross country, basketball, swimming, baseball, lacrosse, tennis, track (indoor and outdoor) and golf.

The women's program fields 11 varsity teams: basketball, cross country, field hockey, gymnastics, lacrosse, swimming, tennis, volleyball, indoor and outdoor track and softball.

Both the men and women compete for state, regional, and national honors under the guidance of an outstanding coaching staff. The Towson Center complex is the official home of the Tigers and includes a 5,200 seat arena and 6,000 seat stadium, making it a showcase facility in the metropolitan Baltimore area. Scholarships are available for gifted student-athletes. All students are encouraged to participate according to their interests and abilities. Prospective student-athletes interested in competing on a varsity team should contact the head coach of that sport.

INTERNSHIP/COOPERATIVE EDUCATION (I/CE)

I/CE is an elective program in which sophomores, juniors, and seniors of good academic standing:

1. alternate semesters of classes with periods of full-time paid employment —co-ops— in approved pre-professional posi-

tions in business, industry, and private and public agencies.
OR

- combine with their classes approved work —internships— paid or voluntary, at least 100 hours per semester. All internships carry academic credit. Most departments have created a practicum course through which students register for credit *after they have been hired for an internship*. The number of credits and criteria for eligibility are determined by each academic department. I/CE staff inform students of and screen students for fulfillment of departmental criteria and coordinate placement of qualified students into internships.

Participating departments include: accounting and finance, art, biology, chemistry, computer science, economics, English, geography and environmental planning, international studies, management, marketing, mass communication, mathematics (co-op only), modern languages, physical education, physics (co-op only), psychology, and sociology.

Students interested in the I/CE program should attend an information session (held every Monday and Tuesday, Fall and Spring semesters and every Monday, minimester and summer sessions, 3:00 p.m., Lida Lee Tall 307), or, if they cannot attend, phone 321-2932 to arrange an individual interview.

JUDICIAL AFFAIRS

Administration, Room 112, (301) 321-2057

When a student is alleged to have violated the Student Code of Conduct or the Residence/Board Contract, this office interviews and counsels students in the discipline process, and facilitates the student appeal process. The office also serves as a resource to faculty and administrators.

LIBRARY FACILITIES

Albert S. Cook Library, (301) 321-2462

The Albert S. Cook Library opened in 1969. It is a functional, open-stack library near the center of the campus, and has a seating capacity of 1,500. Among its facilities are a reserve collection, individual carrels for quiet study, typewriters, reading machines for microforms, equipment for listening to tapes and records, information retrieval equipment, film services, video services, A-V equipment delivery, and the electronics repair shop. An automated circulation system provides accurate and efficient book control.

With a collection of approximately 986,500 items and approximately 2,500 periodicals, the library is a growing and increasingly important part of the university community. In order to provide proper library resources to support the curriculum, faculty members select many of the 45,000 items added each year. The library has a U.S. Government Documents Depository, Maryland State Documents Depository, collections of textbooks and curriculum guides for elementary and secondary education, a collection of educational resource documents (ERIC), a collection of early English literature, a strong women's studies collection, and a collection of early American periodicals. The reference department services include group and individual instruction in finding information for class assignments and automated bibliographic searching for research projects.

In addition to the materials in the Cook Library, Towson students are fortunate to have nearby the resources of two major public library systems and the Maryland Historical Society Library. Towson also has a cooperative borrowing agreement with other state college libraries.

MINORITY AFFAIRS

Office of Minority Affairs

University Union, Room 217, (301) 321-2051

Towson State University is committed to a multicultural, multi-

racial environment which is conducive to the equal educational opportunity of the population we serve. To this end, the Office of Minority Affairs works to assure that the needs and concerns of minorities are recognized, responded to and reflected in the academic and social services, policies and programs of the university. The Office of Minority Affairs is also a consultative support service for faculty, students and staff. The African-American Cultural Center is the cultural arm of the Office of Minority Affairs.

African-American Cultural Center

Media Center, (301) 321-2516

The African-American Cultural Center (AACC), sponsors programs and activities which reflect the life styles, history, and culture of peoples of African descent. The Center also seeks to stimulate scholarship at Towson State University in the areas of African-American, African-Caribbean, and African studies. The Center sponsors the Towson State University Gospel Choir, publishes a newsletter, "Ebony Notes", hosts lectures and discussion groups, provides information and referral, showcases amateur and professional artists, and sponsors the Visiting Lecturers Grant program.

The Center, which houses an ever growing collection of art, music, and popular and scholarly literature, provides a comfortable setting in which to study, relax, and socialize. Student or staff groups may reserve the Center for meetings and informal gatherings.

The Closet

University Union, Room 217

Located just inside suite 217 in the University Union is the Closet. This room houses a wealth of information concerning graduate schools, fellowships, scholarships, employment opportunities and other news relevant to Black students, faculty and staff. The information is updated regularly and no appointment is necessary so interested parties are encouraged to stop by often.

RECREATIONAL SPORTS

The Towson State University Division of Recreational Sports (Intramural Sports, Informal Sports, and Club Sports) provides opportunities for all members of the campus community to participate in a variety of formal and informal activities and events regardless of sex, age, skill level, or sports interest.

Through active involvement in the programs offered participants and student employees can develop a permanent and positive interest in recreational sports participation and the benefits of an active lifestyle.

Intramural Sports—The program is designed to provide a cooperative experience, based on fellowship through competitive and non-competitive sports. Offering more than 20 different activities, ranging from weight-lifting to badminton (teams and individuals). Most sports involve men's, women's and co-rec teams.

Informal Sports—Students, faculty and staff are encouraged to participate in a variety of unstructured recreation activities between classes, noon time, and evenings. The gymnastics, the weightroom and the swimming pool are available when classes, intramurals or athletic practices are not scheduled.

Club Sports—For students, faculty and staff with special interests, the Club Sports experience has proven to be quite rewarding and educational. Clubs are student run with faculty advisors.

RESIDENCE PROGRAM

Newell Hall, Lower Level, (301) 321-2516

The residence program provides living facilities for full-time degree candidates and promotes educational programs and activities which supplement the academic mission of the university. The residence staff and the elected executive board of the residence council strive to maintain an environment conducive to the individual's achievement of academic goals and development of self-reliance, leadership, and life skills.

Residence facilities are available to students only when classes are in session. No student is permitted to remain in residence more than 48 hours after ceasing to attend classes or dropping below full-time degree status without approval through the Center for Academic Advising.

SPECIALIZED SERVICES

Commuter Affairs Office

University Union, Room 318, (301) 321-4081

The Commuter Affairs Office promotes involvement and participation of commuting students (about three-fourths of the student population) in all phases of campus life. Through ongoing programs, special projects and annual events, this office provides assistance with specific problems and identifies often overlooked educational resources and extracurricular activities. The office provides information about the Mass Transit Administration's Ridesharing program, Maryland and Cross-Country Ridesharing, and student carpooling, as well as bus and metro scheduling. A single brochure, compiled by this office, combines all six schedules of the buses that come directly to campus. Also sponsored and compiled is a weekly listing of campus events. "Campus Attractions" is distributed to faculty, students and staff in each building and the more than 100 offices throughout the campus. The Commuter Association of Towson State (C.A.T.S.) helps publish and distribute the Commuter Express newsletter each semester. Every Tuesday the "Good Morning Commuters!" program offers free coffee, tea, hot chocolate and donuts to commuters who arrive early for 8:00 classes and premium parking spots. The "After Lunch Bunch" offers free sodas and popcorn every Wednesday afternoon. The "Evening Refresher" has free cookies and sodas for those with late classes each Thursday from 4:30–6:30 p.m. In addition, the Commuter-in-Residence program, held each spring, offers commuters the chance to try resident life for approximately \$115.00 (room and board) per week. The Commuter Expo, held after Labor Day each fall, is a day-long event which highlights activities and services for new commuter students and encourages the direct participation of continuing commuters.

Disabled Students Services

Dowell Hall, Second Level, Room 110, (301) 321-2638 (Voice or TDD)

Towson State University is in full compliance with section 504 of the Rehabilitation Act of 1973 and is committed to offering educational opportunities to all who can profit from them. All programs and activities at the university are made available to disabled persons. Prospective students, as well as students currently enrolled who have physical disabilities, are urged to contact the coordinator of the Office for Special Needs regarding such matters as special registration, reader service, specialized equipment, note takers, sign language interpreters, or other arrangements that can aid in removing or circumventing architectural, social, or procedural barriers. The Office for Special Needs will also help students locate advocacy groups, peer support groups, and accurate information on construction that could cause temporary barriers.

English Language Center

Hawkins Hall 103-D, (301) 321-2552

The English Language Center offers intensive English instruction of 20 hours per week for students who are preparing for admission to the University. The ELC also provides semi-intensive courses for those students who have been admitted to Towson State but who need to improve certain language skills. The Center is also open to students who are not preparing for university study; however, the course objectives remain academically oriented.

International Student Services Office

Hawkins Hall, Room 103-C, (301) 321-2421

The International Student Services Office coordinates services and programs for Towson State's international students and can offer assistance in the following areas:

- immigration matters
- university regulations and services
- community and campus intercultural programs
- personal and academic concerns
- orientation for new students

The office also coordinates the International Student Exchange Program and offers basic resources for U.S. students wishing to study abroad. (See "University Curriculum" section of this *Catalog* for further information.) For information about international student admissions requirements and procedures, see the "Undergraduate Admissions" section of this *Catalog*.

Student Day Care Center

Lida Lee Tall, (301) 321-2652

The Student Day Care Center was established by and continues to be assisted financially by the Student Government Association. The center provides quality care for the children of Towson State University students and offers the children opportunities for physical, emotional, and intellectual growth.

Children of ages two through five are eligible for the day program, and children of ages three and one-half through 12 for the evening program. Space is limited in both programs, so it is important to submit a formal application to the center as early as possible. The center accepts children on a first-come, first-served basis, but it gives priority to the children of full-time students.

Tuition for the day program is based on a sliding scale. A fixed fee is charged for Evening Care and After School and Before School Programs. The center follows the academic calendar. It is open from 7:30 a.m. until 10:00 p.m. whenever the university is in session.

Tutorial Services Center

University Union, Room 317, (301) 321-2291

Students should seek tutorial assistance as soon as a course problem occurs. The course instructor is usually the best resource available to the student. Our Tutorial Services Center is a second source of support. The Center provides tutoring services, free of charge, for TSU students. Tutors are available for many lower-division and some upper-division undergraduate courses. However, tutorial services depend upon the availability of qualified tutors. Students are accommodated on a first come, first served basis. Additional academic support services include:

- * The Chemistry Tutoring Service
Smith Hall 506. (301) 321-3054
- * The Computer Science Tutoring Service
Cook Library 400C, (301) 321-2424
- * The Learning Center (Reading Skills)
Hawkins Hall 208–210, (301) 321-2643

- * The Mathematics Tutoring Service
Cook Library 7
- * The Modern Languages Tutoring Service
Linthicum Hall 319F, (301) 321-2883
- * The Physics Tutoring Service
Smith Hall 506, (301) 321-3020
- * The Writing Lab (Writing Skills)
Linthicum Hall 16, (301) 321-2655

Veterans' Affairs

Administration, Room 232, (301) 321-2097

The office of the Registrar provides coordination between veteran/dependent students and the Baltimore regional office of the Veterans Administration. The director of Registration and Scheduling establishes procedures and prepares forms and correspondence for eligible students to receive educational benefits. Additionally, that officer monitors class attendance and evaluates academic progress to ensure that satisfactory progress of those receiving benefits is maintained and also supervises the employment of VA work/study students.

Students taking courses at other institutions concurrently with courses at Towson State University may be certified for both institutions by the TSU Registrar.

Students may visit the office daily from 8:30 a.m. to 4:30 p.m. without appointments.

The normal time for processing an enrollment certification is six weeks. Certification is not automatic. The proper VA forms must be completed for each semester.

Withdrawals

When students must decrease credit load during the course of the semester, they must notify the office of the Registrar. Failure to do so will result in termination of benefits and a financial debt to the Veterans Administration.

FX Grades

The student who receives an "FX" at the end of a term should contact the Registrar's office immediately. Failure to do so will result in a substantial financial debt to the Veterans Administration.

Change of program

Veterans may change their academic program once without VA clearance. For more than one change of program, however, the veteran is required to undergo VA counseling. A change of program with the VA is required whenever a veteran makes a curriculum change in which any of the courses for which VA benefits were previously received do not transfer into the new program.

Independent Study

Payment for independent study courses will generally be made on tuition and fees basis only. Monthly rates may be paid for such courses, provided that more than half of the total number of credits for that semester are in courses requiring class attendance. Check with the Registrar's office to determine eligibility to pay for independent study courses.

Advance Payment

The advance payment consists of the allowance for the remaining portion of the initial enrollment month plus the full allowance for the next month. Students are not guaranteed two full calendar months pay; therefore, they must not expect advance pay to completely cover tuition and fees. The advance pay can be applied for

only if the student will be enrolling at the university on at least a half-time basis and meets the established office deadlines.

Students may request advance pay for the regular academic semesters by signing an enrollment certification in the office of veterans' affairs. These forms *will not* be mailed to students. Evening hours will be established each semester for students who are unable to come in during the day.

Approved program

The VA will pay the veteran only for the courses listed in the university *Catalog* that are required for a degree. If students take courses in addition to those listed for their curriculum, they will not be entitled to receive VA benefits for them.

Special Students

Non-matriculated students are those students classified as special students and are taking courses for credit but have *not* been officially admitted or readmitted to a degree program at Towson State University. These students must meet the same minimum grade point average as degree candidate students. After completion of a minimum of 12 semester hours at Towson State University, all special students must apply for regular part-time undergraduate degree candidacy or be admitted into a graduate degree program or lose their eligibility for certification of VA educational assistance benefits.

Women's Center

Media Building, (301) 321-2666

The Women's Center is located on the third floor of the Media Building and consists of a lounge, library, and office. The drop-in lounge is available to all for study, conversation, or a moment of relaxation.

The Women's Center maintains an extensive library containing many books by and about women, and also periodicals, information files, bibliographies, and a collection of women's studies syllabi. Because a large part of this collection is available nowhere else on campus, women's studies students or students doing papers or projects focusing on women find the women's center's library especially useful.

A wide ranging referral system offers information about campus and community groups and organizations, individuals with skills and expertise in specific areas, and individual professionals in the fields of medicine, law, mental health, etc. The center provides a bulletin board where job notices, conferences, and news-letters relating to women from all over the country are posted.

Throughout the academic year a variety of programs will be offered free of charge to the public.

STUDENT DEVELOPMENT

Office of Student Development

University Union, Room 313, (301) 321-3307

Located on the third floor of the University Union, the Office of Student Development provides advising for the Student Government Association and its nearly 80 affiliated organizations. Towson's 23 sororities and fraternities are also advised, and the office maintains contact with the national chapters of these organizations. Student Development also directs the on-campus Greek housing program.

Other programs sponsored by the Office of Student Development includes the Ethics Forum, the Non-traditional Students Program, the Students Services Mug Awards, and nominations for Who's Who Among Students in American Universities and Colleges. Students who are seeking to form a new group on campus can receive assistance on the process of SGA affiliation, writing a constitution, and recruiting and retaining members.

Student Government Association

University Union, Room 226, (301) 321-2711

The Student Government Association is an integral part of the university community and is recognized as a contributing participant in the governance of the university.

Upon enrolling at Towson and paying the student activity fee, each full-time undergraduate student automatically becomes a member of the SGA. The organization itself consists of an executive branch, composed of a president, vice president, treasurer, and various appointed officials, and a legislative body called the Senate, composed of 14 students elected at large and one student appointed from the freshman class.

The Student Government Association operates on a budget allocated from student fees and has fiscal autonomy. In accordance with the mission of the university, the broad objectives of the SGA are outlined in the Student Government Association constitution.

1. to improve student awareness and welfare;
2. to foster the recognition of the rights and responsibilities of students;
3. to fulfill responsibly those privileges of self-government; and
4. to sponsor out-of-class experiences which complement in-class experiences.

The Student Government Association's activities enhance the educational and social experiences of students as members of the university community. All students are invited to aid in planning and to participate in its events. Also, all students are invited to attend meetings every Tuesday of the regular semester at 4 p.m. in the University Union.

The Student Government Association sponsors the Speaker Series, Homecoming activities, the Student Book Exchange, Film Series, Pre-Preakness field party, finals week study hall and survival kits, TGIF, the Senior Prom, and a variety of cultural and sporting events both on and off campus. The SGA also co-sponsors the Saturday Night Live dance series and the Club Potpourri.

Student Organizations

University Union, SGA Office, (301) 321-2711

There are over 75 student-run organizations recognized by the Student Government Association. These groups provide students with a variety of opportunities and experiences. They also produce the major student publications of the university, such as *Towerlight*, the weekly student newspaper; *Tower Echoes*, the yearbook; and *The Grub Street Wit*, the literary magazine.

Other types of organizations recognized by the SGA include cultural organizations, fraternities and sororities, future professional organizations, honorary societies, major-related organizations, special interest clubs, and religious organizations.

Additional information about student organizations and extra-curricular activities can be obtained by calling the SGA Office at 321-2711 or referring to the student handbook, *Compass*, which can be obtained at the Orientation (Triad) Office.

UNIVERSITY UNION

University Union facilities are designed to provide both an educational center for out-of-class activities and a center for student

services. The union houses educational and cultural programs of value for the entire academic community, complementing the university curriculum. The union is also the place where resident and commuting students, faculty, staff, and alumni can establish social activities, relax and share experience.

The first level of the three-story brick structure includes a snack bar, university store, vending area, post office, banking machine, locker rooms, ticket office, art services, recreation center, eight bowling lanes and parking services office. The second level includes a cafeteria, a dining room and lounge, art gallery, the Potomac Lounge, a candy and tobacco counter, student organizations offices, placement office, events and conference services, auxiliary enterprises, and dining services administrative offices. The third level contains the tutorial services center, seven conference rooms, a photographic laboratory, a reception lounge, a large multipurpose room, plus the offices of Commuter Affairs and Student Development.

University Ticket Office

Towson Center, Main Lobby, (301) 321-2244, and University Union, Ground Floor

The University Ticket Office provides the university community with a variety of tickets for both on-campus and area events. Student-sponsored activity tickets, athletic tickets, theatre tickets, as well as tickets to the events at the Towson Center/stadium complex are on sale at both locations. The Ticket office is also an outlet for all Ticketron® events, including those held at Merriweather Post Pavilion.

Post Office

University Union, Ground Floor, (301) 321-2260

The Post Office provides full postal services, excluding parcel post packages and registered mail addressed to foreign countries. The Post Office is located on the ground floor of the University Union. It provides window service from 9:00 a.m. until 4:15 p.m. Monday through Friday.

Each resident student is assigned a mailbox. Students should visit the Post Office to receive their box numbers and combinations.

University Store

University Union, Ground Floor, (301) 321-2323

The University Store supplies all required and recommended textbooks as well as a selection of general reading materials including reference/study aides, current fiction and nonfiction works, children's books and magazines. Other available products include basic school/art supplies, computer supplies, film and film processing, health and beauty aids, snacks, gifts and greeting cards. Specialty TSU emblematic merchandise such as glassware, stationery, and imprinted adult and children's apparel distinguish the University Store from other general retail outlets. The approved Towson State University class ring is also available through the University Store. The Store accepts personal checks accompanied by appropriate identification. MasterCard and Visa charge cards are accepted.







The College of Continuing Studies

The College of Continuing Studies at Towson State University provides degree and non-degree-seeking students with the opportunity to pursue, part-time and full-time, a liberal education in the arts and sciences, and in professional fields.

Courses that satisfy degree requirements are available, during the day as well as evenings and weekends, to students who do not attend the university on a full-time, week-day basis. Additionally, complete degree programs in many areas of study are administered through the Evening Program, the Summer Program, and the Weekend Program on the university campus and in community settings. The College also offers comprehensive academic advisement for all Continuing Studies students.

Non-traditional learning formats, such as directed independent study and television courses, are provided for students who may require more autonomous learning than the typical classroom course permits. Additionally, students may be evaluated on prior learning through life experience and receive university credit. Lifelong learning opportunities, such as the Elderhostel and the Informal Course programs, fulfill a significant function of continuing studies by meeting the intellectual and personal needs and interests of the community. Furthermore, the College of Continuing Studies responds to the educational needs of business, industry and professional organizations within the community.

These educational opportunities emphasize the importance of lifelong learning in our lives—at home, at the work site and in the community.

Norma R. Long, Dean

COLLEGE OFFICE

Administration Building
Room 223
(301) 321-2022

Norma R. Long, Dean
 G. Franklin Mullen, Director of Academic Affairs
 Frances A. Allison, Director of Operations and Services
 Glenda Foreman, Director, Internships/Cooperative Education
 John R. Hild, Fiscal Officer
 Michael Bachman, Director of Non-Credit Programs
 Carolyn Harriger, Program Coordinator
 H. Allan Lipsitz, Coord. of Academic Advising/Program Coord.
 Shari B. Zaret, Academic Advisor/Program Coordinator
 Suzanne Walker, Academic Advisor/Program Coordinator
 Angela DeVito, Academic Advisor
 Joan T. Harrison, Academic Advisor
 Christiane Mecky, International Student Advisor
 Lee Sachs, Columbia Center Site Coordinator

OFFICE

Administration, Room 223, (301) 321-2022

The academic policies described in the admissions, curriculum, and academic regulations sections of this *Catalog* apply to continuing studies students unless modifications are necessary to accommodate their part-time, special and/or evening status. All such modifications are included in this section of this *Catalog*.

The College of Continuing Studies administers the evening program, the summer session, the weekend university, the January session, and the Columbia Center of Towson State University. Programs and services are designed to meet the needs of the part-time and adult student.

Other programs under the auspices of the College of Continuing Studies are: Directed Independent Study, Second Bachelor's, College in Escrow, Credit For Prior Learning, Orientation/Open House, Informal Courses, Business and Industry Training Programs and other non-credit courses and workshops, English Language Center, Certified Employee Benefits Specialist Program, Internships/Cooperative Education, Elderhostel, continuing education units, and television courses. The College also sponsors child care for evening and part-time students.

PROGRAMS AND MAJORS

1. The arts and sciences program is offered for those who wish to develop the foundation for future specialized or professional training, or to improve their occupational competence by completing requirements for a bachelor's degree. The program and the degree requirements can be found in the curriculum section of this *Catalog*.
2. The teacher education program is designed for those who wish to follow a course of study leading to a degree and/or certification to teach. A full description of the program and the degree requirements can be found in the curriculum section of this *Catalog*.
3. General courses are also available for those who wish to develop greater personal effectiveness in their daily lives and in contemporary society.

All majors offered at Towson State are available to continuing studies students who are able to attend during the day. Complete degree programs are available in the evening in the following areas of study: accounting, art, arts and sciences, biology, business administration, (finance, management, marketing), chemistry, computer science, economics, education (early childhood, elementary, secondary), English, general studies, geography and environmental planning, history, law enforcement and correction, mathematics, natural science, psychology, social sciences, and sociology.

ACADEMIC ADVISING

See the "Student Services" section of this *Catalog* under "Advising" for further details.

ADMISSION

Admission is the official acceptance of a student as a degree candidate. Registration is the enrollment in courses for a particular semester. All persons who have undergraduate status are free to register as non-degree students for courses without formal admission to the University. For eligibility requirements and deadlines, refer to the admissions section of this *Catalog*. Individuals who wish to apply for part-time degree candidacy are urged to make an appointment with an academic advisor to determine admission eligibility and to plan their academic programs.

DEGREE CANDIDATES

Degree candidates are those who are taking courses for credit and have been officially admitted or readmitted to a degree program at Towson State University. Degree candidates should arrange conferences with an academic advisor on a regular basis to plan their academic programs.

See the "University Curriculum" and "Academic Regulations" sections of the *Catalog* for a description of degree requirements and academic standards.

NON-DEGREE STUDENTS

Students who wish to enroll as non-degree (non-matriculating) students must complete and submit an enrollment form to the College of Continuing Studies before registering. Persons who have been denied admission to Towson State University will not be permitted to attend as non-degree students. They may, however, transfer to the university if they meet transfer admission requirements after attending another college or university. Persons who graduated from high school within the last three (3) years must formally apply for admission in order to attend the University.

Students who do not plan to obtain an undergraduate degree from TSU may attend indefinitely as non-degree students. However, a 2.00 cumulative grade point average must be maintained after 56 credits have been accumulated, or these students may not continue at TSU.

Non-degree students who plan to obtain an undergraduate degree at TSU may apply for admission as degree candidates after 25 credits have been earned and a 2.25 cumulative grade point average has been attained. Students who wish to earn a degree from TSU should be aware that only the first 56 credits earned as a non-degree student can be applied to an undergraduate degree. Non-degree students who are not eligible for admission after 56 credits have been earned may no longer attend the university.

In order to determine the catalog that will stipulate graduation requirements, eligible students who have attended other institutions and intend to obtain an undergraduate degree should apply for admission before enrolling.

International students on F-1 Visas and non-native speakers may not be enrolled as nondegree students without written permission from the international student advisor.

Students must take an English as a Second Language test and if they are placed in remedial English courses, must complete the sequence of courses prior to their third semester.

ATTENDANCE

Students are expected to attend all classes. Each faculty member sets individual policy on absences. Policies vary, and it is the responsibility of the student to understand clearly the absence policy of each instructor and to act accordingly.

SENIOR CITIZENS

The College of Continuing Studies will admit senior citizens to classes on an audit/credit, space available basis and will waive

payment of registration fees and tuition for two courses (excluding special format courses) each semester. A senior citizen is one who is over 60 years of age who is retired, who does not have other full-time employment, and whose chief income is from retirement.

DECLARATION OF MAJOR

Degree candidates should formally declare their majors with their academic departments.

STANDARDS FOR CONTINUING STUDIES DEGREE CANDIDATES

Academic standards for part-time degree candidates are the same as for full-time degree candidates. For details, see "Regulations Governing Academic Standards" in the Academic Regulations section of this *Catalog*.

PROCEDURES FOR READMISSION

Students who have lost their degree candidacy status, either as a result of academic dismissal or withdrawal, may apply for readmission, if eligible. To determine readmission eligibility, students may wish to see an academic advisor, to review previous work and plan their future academic programs. Deadline for readmission is August 1 for the fall session, and December 1 for the spring session. Students must be in attendance in at least one course in the semester for which they are readmitted. Readmission Forms are available from the Registrar's Office, Room 236, Administration Building, or the College of Continuing Studies Office, Room 223.

HONORS PROGRAMS

Part-time degree candidates and second bachelor's degree candidates may qualify for departmental honors, and/or graduation with honors. Please refer to the Academic Regulations section of this *Catalog* for criteria.

ORIENTATION/OPEN HOUSE

Part-time students who are new to the university attend CCS Orientation in the summer or in January before they begin their first semester. Especially for adult students, this program offers information and introduction to the TSU campus. Student services, admission, registration, university requirements, and other pertinent academic information are some of the topics covered. Students who will be attending TSU for the first time as non-degree students, or those who are thinking about returning to school in the future, are welcome to attend. For further information, call 321-2471.

SUMMER SESSION

The summer session includes two consecutive day terms and one evening term. Workshops, science courses and courses necessary for teacher certification are special features of the summer session. A large variety of courses necessary to complete the General University Requirements and the majors are offered as well.

THE WEEKEND UNIVERSITY

Since the spring term of 1978, the College of Continuing Studies has offered classes on Saturdays. Classes are available in eight- and fifteen-week formats. The weekend university appeals to students who are unable or unwilling to attend class during the week, the continuing student who wishes to accelerate progress toward his or her degree, the student seeking to return to study after a time lapse, and the academically talented high school student, through the College in Escrow program.

JANUARY SESSION

The January session, or minimester, is designed to offer both the student and the professor an opportunity to explore a nontraditional educational experience. The subject matter is usually organized around a highly specific theme. Both the thematic approach and the concentrated time span encourage a depth of study not possible during the regular semester.

The courses offered include independent study, directed readings, practicums, travel-study, seminars and field study. Most minimester courses are offered during the day.

The student is restricted to one course per term, carrying from one to three credits. Credits for the minimester are equivalent to credits earned during the regular semester.

Non-degree students and part-time degree candidates are eligible to register for the January session. The general university fee will be assessed for these students.

Fees will be assessed on a per-credit basis plus a registration fee payable at the time the student registers for the course.

Registration for most courses takes place in November. The exact times are advertised through the publications of the university.

TSU AT COLUMBIA

The College of Continuing Studies operates an education center in the Town Center of Columbia, Maryland. The Center is located in the Banneker Building, 5829 Banneker Road. Courses are offered for credit in a variety of disciplines including the arts and humanities, and personal enrichment courses are offered through the Informal Course Program.

Additionally, short courses, workshops, and seminars are offered for professionals interested in job-related continuing education. Towson State University and Computerland offer a variety of computer courses for business and personal applications. Classes are intended for the beginning or expert student and are taught on IBM PC's.

For additional information, call TSU at Columbia Center, 964-0260.

SECOND BACHELOR'S PROGRAM

The Second Bachelor's Program is designed to meet the needs of college graduates who wish to attain proficiency in another major field. To qualify for admission, students must hold a baccalaureate degree either from Towson State or from another accredited institution.

A maximum of 90 transferable credits (64 from a community college) from any accredited institution may be applied towards the second bachelor's degree. In addition, the student must complete at least 30 credits in residence at Towson State, and must meet all requirements of the "new" major with at least one-half of the "new" major credits completed in residence at Towson State past the first degree. These credits may not be met through the Credit for Prior Learning program. Each student must also complete an advanced writing course.

To fully acquaint yourself with the program and its advantages, please arrange an appointment with an academic advisor, 321-2471. At that time, questions regarding formal admission, academic advising, course load, and other requirements may be discussed in detail.

COLLEGE IN ESCROW

All high school students who desire to register for a college course must apply through College in Escrow. This is a program designed to allow motivated and outstanding high school seniors to begin college work before graduation from high school. (Talented underclassmen are sometimes admitted.) Credits earned will be awarded to the student upon matriculation at Towson State or

another degree-granting institution. (It should be noted that acceptance of transfer credit is the prerogative of each individual school.)

Escrow students may select introductory courses or advanced courses for which they have the necessary prerequisites. They may be taken during the day or evening hours.

In order to participate in the College in Escrow Program, students should have completed their junior year, have a "B" average, and confer with an academic advisor. Advising must precede registration. Scholarships are available. For information or to make an appointment with an academic advisor, call 321-2471.

CREDIT FOR PRIOR LEARNING

CLEP/Departmental Examinations

Students may receive up to 32 hours of credit for what has been previously learned through non-college studies or experience. Achievement, to be determined by the department, must be equal to or superior to that of a student having earned a "C" through classroom work.

Participating departments may offer credit for prior learning in several ways: either through standardized evaluative instruments, such as CLEP or departmental exams, or through individualized course syllabi and evaluative procedures.

If credit is granted, the student receives the same number of credits for the course as the student who takes the course the traditional way. A mark of "PE" is reported to the Registrar by the department and is placed on the student's transcript; it is not calculated into the student's cumulative grade point average. Students *may not* take credit for prior learning to repeat courses already taken for the purpose of changing a previously earned grade or altering a student's grade point average.

Military Credit/Experience

In addition, students may use military coursework and experiences for crediting purposes. Veterans and military personnel must be formally admitted to the university, in good academic standing, and must have successfully completed military training as documented on an official AARTS transcript. The American Council on Education (A.C.E.) evaluation guidelines will be utilized to determine how credits will be awarded.

For additional information, contact the College of Continuing Studies at 321-3317.

NON-CREDIT PROGRAMS

In addition to courses for academic credit, the College of Continuing Studies offers courses, seminars, contract training programs, and professional development programs and conferences on a non-credit basis. These courses typically do not require exams or research papers.

Non-credit learning opportunities include contract training services for business, industry, health care, and governmental firms; the Informal Course Program; and Continuing Professional Education programs.

Continuing Education Units (CEU's) are awarded in selected noncredit offerings and provide the participant with a uniform, nationally recognized certification of participation. For qualifying programs, one CEU is awarded for each ten contact hours of instruction.

Contract Training Services for Business Industry, Health Care, and Governmental Organizations

The College of Continuing Studies custom designs and operates training and education programs which are held on site at the contracting organization or on-campus. Some of the contract train-

ing programs the College of Continuing Studies has offered include: personal computer software applications, technical and business writing, supervisory and management development, effective oral presentations, stress management, and CPR. For additional information, call the Director of Non-Credit Programs at (301) 321-3532.

The Informal Course Program

Informal courses are offered on campus and at the Columbia Town Center during the fall, spring, and summer semesters and are open to the general community. Some of the courses offered include Floraculture, Real Estate, Music Appreciation, Tae Kwon Do, Cardiac Health and Fitness, Photography, Ballroom Dancing, and Developing Self Esteem in Children. Each semester, one-night seminars entitled "Cultures of the World" are offered.

Such areas as Japan, the Soviet Union, the Middle East, the Third World, and France have been featured.

A wide range of personal computer applications courses are offered, including Lotus 1-2-3, dBase III Plus, and WordPerfect. Different levels of each course are available. For further information call (301) 321-3532.

Continuing Professional Education

The College of Continuing Studies offers non-credit programs in the form of seminars, courses, workshops, conferences, and institutes in response to groups or professionals requiring inservice training, updating or upgrading of licensure, or certification/recertification.

Continuing professional education offerings include the Certified Employee Benefit Specialist Program, co-sponsored with the International Foundation of Employee Benefit Plans and University of Pennsylvania's Wharton School. To attain the Certified Employee Benefit Specialist designation, a person must take and pass ten national examinations. As preparation, each semester we offer one or more forty-five-hour courses covering one of the ten exam topics.

Continuing professional education courses have been conducted for psychologists, certified public accountants, speech-language pathologists, counselors, occupational therapists, educators, and other professionals. Call the Director of Non-Credit Programs at (301) 321-3532 to discuss how a program can be set up for your profession or occupation, or to find out about current program offerings.

INTERNSHIP/CO-OPERATIVE EDUCATION

Lida Lee Tall 307, (301) 321-2932

The I/CE Office arranges "co-ops," in which students alternate semesters of paid work with semesters of study, and internships, in which students work seven to 20 hours per week while attending classes. See the "Student Services" section of this *Catalog* for details.

ELDERHOSTEL PROGRAM

The Elderhostel program, inspired by the youth hostels and folk schools of Europe, is a network of over 1,000 colleges and universities in 50 states and abroad which offer special low-cost, short-term residential academic programs for adults over the age of 60. Towson State University began its involvement with this national, highly regarded program by offering several one-week-long programs during July, 1982. Participants are housed in a residence hall, take their meals in a campus dining facility, and participate in a wide variety of on- and off-campus extracurricular activities. Each week, participants are offered three liberal arts non-credit courses of normal undergraduate quality, taught by regular faculty members of the university. Registration for the program is handled

by the national Elderhostel office, located at 80 Boylston Street, Suite 400, Boston, MA, 02116. For further information about the TSU Elderhostel program, call 321-3694.

TELEVISION COURSES

Beginning with the spring 1982 term, in association with the Maryland Center for Public Broadcasting, the College of Continuing Studies is offering courses through the Maryland College of the Air. An average of five regular three-credit courses are offered each semester. Instruction will be given in 30 television programs broadcast twice a week for 15 consecutive weeks on the public television stations. There are four required class meetings on campus. Students may register for the television courses through the mail or at in-person registration. Consult the schedule booklet.

THE CONTINUING STUDIES CHRONICLE

The Continuing Studies Chronicle, published six times a year, contains valuable information regarding Continuing Studies, departmental news, and changes in academic policies and procedures. Other standard items in each issue of *The Chronicle* are a calendar of events on campus, dates to remember, and features and continuing columns. Four of the six yearly issues of the newsletter

are mailed directly to students currently taking Continuing Studies courses. The other two issues are distributed to many locations throughout the campus.

CHILD CARE

The Student Day Care Center provides quality child care for the children of TSU students from 7:30 a.m. until 10:00 p.m.

For more information, see the "Student Services" section of this *Catalog* or call the Student Day Care Center at 321-2652.

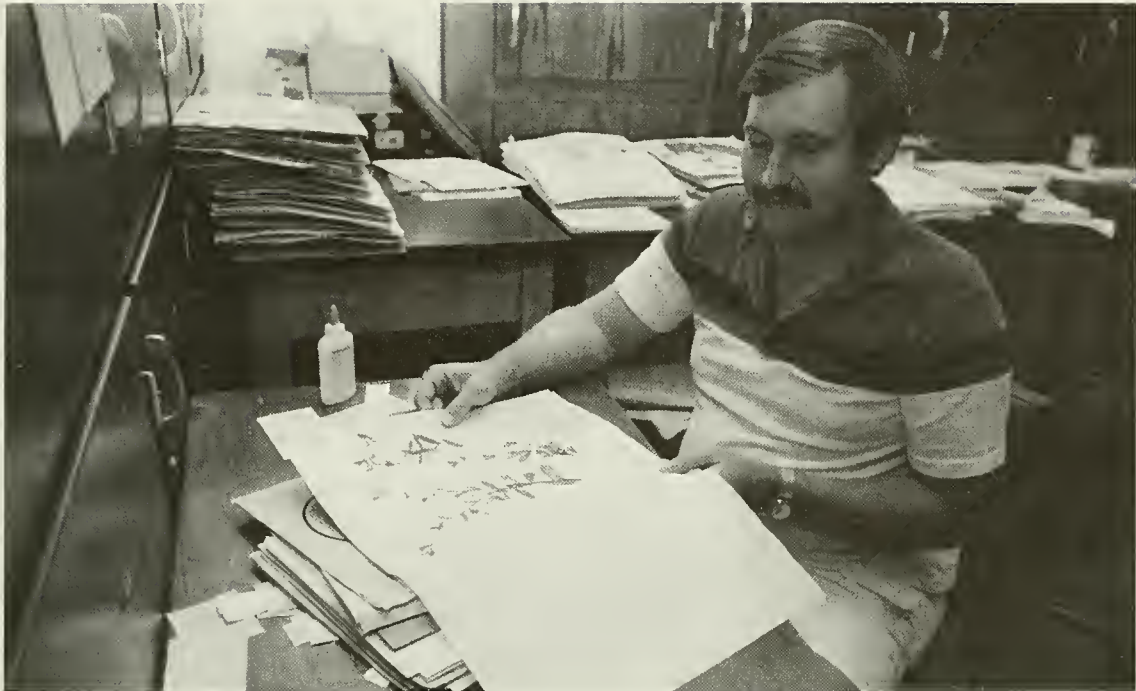
INTERNATIONAL STUDENT SERVICES OFFICE

Hawkins Hall 103-B, (301) 321-2421

The International Student Services Office (ISSO) coordinates services and language programs for students at the university on student visas as well as for permanent residents and citizens for whom English is not their native language. The ISSO is composed of the International Student Services Office and the English Language Center. See the "Student Services" section of this *Catalog* under "International Student Services Office" and "English Language Center" for additional information.







The Graduate School

The Graduate School prepares qualified and dedicated students for career advancement, leadership positions and further graduate study. The university serves the community, state and region by making graduate degree programs available to part-time students who can attend classes only in the evening as well as to full-time students. Numerous students also take advantage of graduate offerings without enrolling in degree programs.

The graduate faculty, which includes recognized scholars and practitioners in many fields, is committed to excellence in teaching in a scholarly environment. The classroom, library, clinical and faculty assets of the graduate programs are supplemented by a community rich in cultural, artistic, social, technological and scientific resources.

Master's degrees are awarded in education, arts and sciences, and fine arts. The university is proud of the many alumni of the Graduate School who fulfill with distinction the requirements of responsible careers.

Michael L. Mark, Dean

GRADUATE SCHOOL OFFICE

Administration Building
Room 225
(301) 321-2500

Michael L. Mark, Dean
 Frederick C. Arnold, Associate Dean
 Margaret W. Masson, Director of Graduate Admissions and Records

OFFICE

Administration, Room—225, (301) 321-2500

GRADUATE PROGRAMS

Master of Arts

Foreign Languages
 Geography and Environmental Planning
 Liberal Studies
 Mass Communication
 Psychology

Master of Education

Art Education
 Early Childhood Education
 Elementary Education
 Music Education
 Reading
 Secondary Education

Master of Science

Biology
 Health Science
 Human Resource Development
 Instructional Technology
 Occupational Therapy
 Professional Writing
 Speech-Language Pathology and Audiology

Master of Fine Arts

Studio Arts

SPECIALIST CERTIFICATES

Post-baccalaureate students in early childhood education, elementary education and secondary education may select a 15 semester hour component of the program which leads to a specialist certificate in one of the following areas:

Early Childhood Education
 Children with Special Needs

Elementary Education

Administration and Supervision of Elementary and Middle Schools
 Curriculum Development
 Educating the Gifted
 The Exceptional Child in the Elementary School
 Reading

Secondary Education

Adult Education

The Community College
 Educational Evaluation
 The Exceptional Adolescent in the Secondary School
 Secondary School Reading
 Secondary Supervision/Administration
 Secondary Teaching Strategies and Classroom Management
 Teaching the Gifted in the Secondary School
 Teaching in the Middle School

The student desiring to work toward a specialist certificate must enroll in the appropriate graduate program and declare his or her intent to complete this component of the program by filing a specialist certificate enrollment form.

CERTIFICATE OF ADVANCED STUDY IN SCHOOL PSYCHOLOGY

The post-master's degree certificate in School Psychology is awarded for the completion of an approved program consisting of thirty semester hours and an internship.

ADMISSION

Admission to the Graduate School at Towson State University is granted to all applicants whose academic and personal qualifications give promise of success in graduate study. The applicant must hold a baccalaureate degree from a regionally accredited college or university.

All students seeking admission to a graduate degree program, or to take courses carrying graduate credit, must file an application for admission to graduate studies prior to first enrollment and have official transcripts of all college work sent to the Graduate School. Transcripts must be sent directly from the institutions attended to the graduate office of Towson State University. Some programs require additional admissions materials such as letters of recommendation, the Graduate Record Examination aptitude and/or advanced tests.

GRADUATE SCHOOL OFFICE HOURS

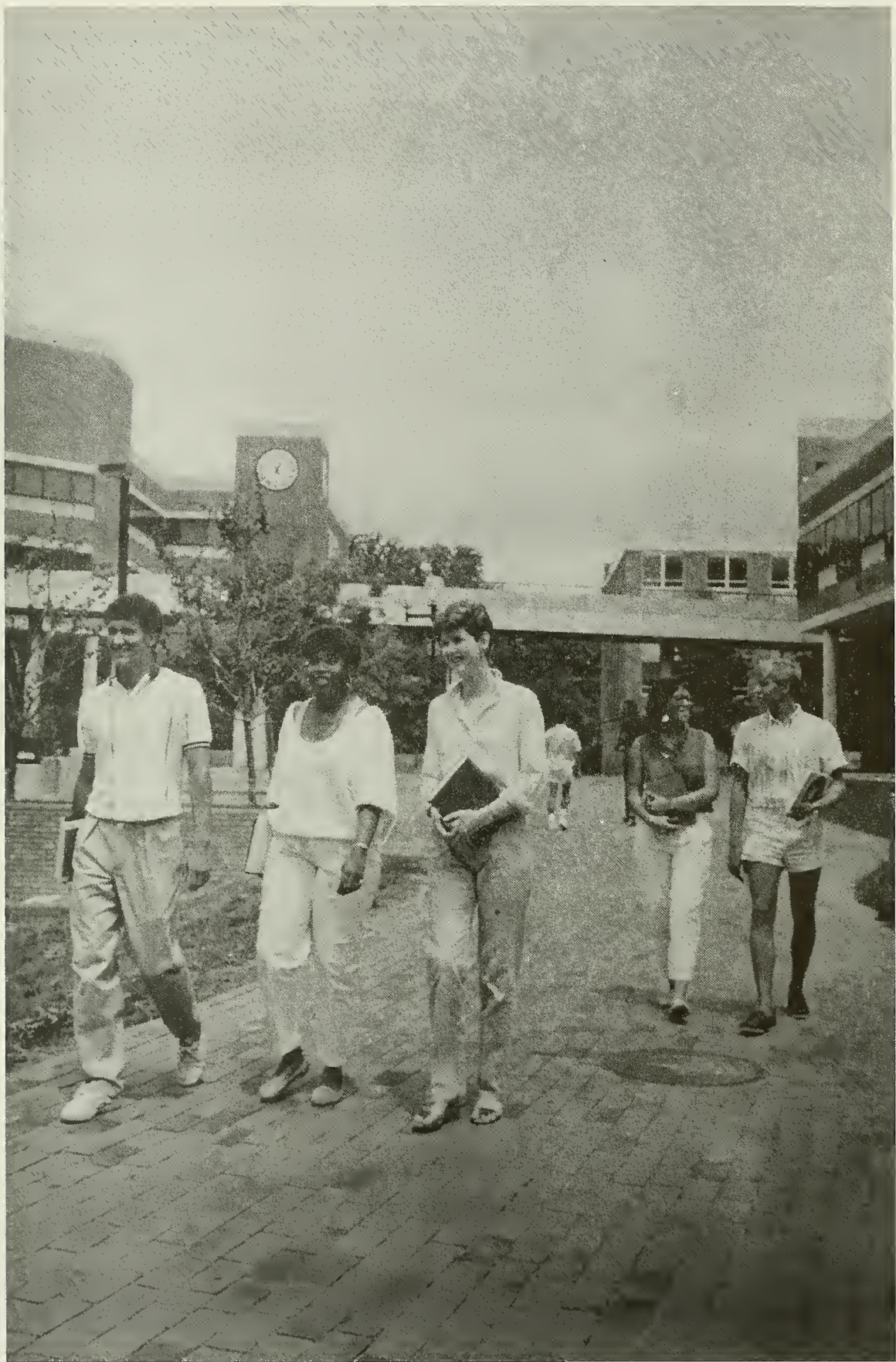
The Graduate School office is open each weekday (except for scheduled holidays) from 8:30 a.m. to 5:00 p.m. The office is also open Monday through Thursday evenings until 6:45 p.m. During registration, the office is open in the evening according to the registration schedule. Students may arrange for appointments with the graduate school staff at other hours.

THE GRADUATE SCHOOL CATALOG

The *Graduate Catalog* contains the academic regulations governing graduate studies at Towson State University. It also relates information regarding individual master's degree programs, course offerings and the application process. A copy may be obtained by calling or writing to the Graduate School.

CORRESPONDENCE AND INFORMATION

All correspondence and requests for information concerning graduate study should be addressed to:
 Dean of the Graduate School
 Towson State University, Towson, Maryland 21204







The College of Allied Health Sciences and Physical Education

The College of Allied Health Sciences and Physical Education, with over 70 full-time faculty, is composed of the departments of Communication Sciences and Disorders, Health Science (including Medical Technology and Health Services Management), Nursing, Occupational Therapy and Physical Education.

Graduates of the professional programs of Speech-Language Pathology and Audiology, Nursing, Medical Technology and Occupational Therapy are eligible to take their respective certification examinations.

In addition to providing courses for students majoring in each of the departments, a broad range of classes is offered for all students in the university. There is a common bond and purpose within the college since all departments prepare students to provide human services designed to improve the quality of life.

Norman L. Sheets, Dean

COLLEGE OFFICE

Administration Building
Room 200
(301) 321-2124

Department of Communication Sciences and Disorders

Professors: GLADSTONE, REITZEL, WALLACE (Chair)

Associate Professor: KILBURG, RIES

Assistant Professors: GHITTER, IACARINO, JACOBS, LAUFER

OFFICE

Van Bokkelen, Room 105, (301) 321-3099

PROGRAMS OF THE DEPARTMENT

Communication Sciences and Disorders offers the *major in Speech-Language Pathology and Audiology*. Students majoring in Speech-Language Pathology and Audiology receive a broad liberal education as well as professional training that emphasizes acquiring knowledge as well as skill. Students who wish to gain admission to the major must register with the chair. Students must fulfill certain "pre-major" requirements before they can be considered for admission to the major.

The major in Speech-Language Pathology and Audiology prepares students for clinical work in public schools, colleges, and medical and paramedical institutions. Graduates have been employed by public schools, hospitals, clinics and governmental agencies.

The undergraduate major in Speech-Language Pathology and Audiology also prepares students for graduate study. The *Master of Science degree program in Speech-Language Pathology and Audiology* is designed to enable students to meet state and national certification and licensing requirements. For more information about the graduate program see the *Graduate School Catalog*.

PRE-MAJOR REQUIREMENTS

Enrollment in the Speech-Language Pathology and Audiology major is restricted due to the availability of clinical practicum experiences, clinical supervisors, faculty and space. Fifty students are accepted into the major each year.

Each student must fulfill certain "pre-major" requirements before he or she can be considered for admission to the major. These requirements include registration with the department as a pre-major, completion of 15 credits of required courses, and a hearing, language, speech and voice evaluation.

Registration with the Department

After gaining admission to the university, the student should contact the Department of Communication Sciences and Disorders to have his or her name placed on the "pre-major" list. Each student must also schedule an appointment with a faculty member to discuss the following:

1. The nature of the profession.
2. The need of a master's degree in Speech-Language Pathology and Audiology to be certified by the Maryland State Department of Education.
3. The need of a master's degree for licensure in Speech-Language Pathology and Audiology to work in hospitals and community clinics in the state of Maryland.
4. The need of a master's degree in Speech-Language Pathology and Audiology to be certified by the American Speech-LanguageHearing Association.
5. The requirement of a year of clinical fellowship.

6. The national certification examination.

7. The procedures for requesting admission to the major.

Students are advised to declare a major in this area as soon as possible and preferably no later than the end of the first semester of their sophomore year.

Pre-Major Courses

The following required courses must be completed before the student can be considered for admission to the major:

SPPA.105 Speech and Language Development (3)

SPPA.210 Phonetics of American English (3)

SPPA.300 Anatomy and Physiology of the Auditory and Vocal Mechanism (3)

SPPA.301 Hearing and Speech Science (3)

PSYC.101 General Psychology (3)

The grade point average of each pre-major will be reviewed upon completion of the premajor courses. Each candidate will be expected to have a minimum cumulative grade point average of 2.50 on a 4.00 scale for all coursework, and a 2.75 in the five pre-major courses.

The department maintains high standards of expectation and performance because all persons seeking to practice speech and language pathology and audiology in Maryland must obtain the master's degree and admission to graduate school depends upon excellence in undergraduate performance.

Hearing, Language, Speech and Voice Evaluation

Students majoring in Speech-Language Pathology and Audiology must be proficient in all areas of communication—reading, writing and oral communication. The faculty expects adequate reading, writing, speaking (language skills), and computational abilities from students. Many faculty utilize an essay format for course examination to evaluate all aspects of the student's language use and comprehension.

Students declaring a pre-major in Speech-Language Pathology and Audiology must have a hearing, language, speech and voice evaluation by the clinically certified and licensed staff. Students should arrange to be evaluated at the first opportunity so that remediation may be sought if necessary. These evaluations are offered by the department on specific, announced days during the first weeks of each semester.

Students exhibiting problems enroll in a therapeutic program and must make satisfactory progress prior to being admitted to the major. If a pertinent medically-based problem is suspected, a student may be required to obtain an otolaryngological examination and submit the written report to the department. Students exhibiting a speech, language, voice, hearing or dialectal difference sufficient to interfere with the therapeutic process will not be allowed to participate in Clinical Practicum. Each student is given a copy of the department's screening policy for premajor and major students in Speech-Language Pathology and Audiology when he or she declares premajor intent.

Students meeting the above requirements will be placed in rank order according to cumulative grade point average. Admission will be extended to students with the highest cumulative grade point average until 50 students have been selected.

Students are admitted to the Speech-Language Pathology and Audiology major during the spring semester of their sophomore year prior to university preregistration and contingent upon compliance with the above criteria. Failure to meet the above criteria will result in automatic forfeiture of admission, for that admitting period, to the major. Vacancies thus created will be filled by students from the rank order list.

REQUIREMENTS FOR TRANSFER STUDENTS

Transfer students who wish to major in Speech-Language Pathology and Audiology should register with the Department of

Communication Sciences and Disorders after they have been admitted to the university. Students should request that their name be placed on the pre-major list during their first semester at Towson State.

Students must submit to the Department an official transcript of any academic work pursued at *all* institutions of higher learning. All transfer credits to be applied to the major must be approved by the department. The five pre-major courses must have been completed within the previous ten years and by the time of admission to the major in the student's junior year.

Transfer students are required to take 20 hours in residence in their major area.

Students who have completed the five pre-major courses must submit their transcripts to the department by February 15 to be evaluated for matriculation with major status. Matriculation in the following fall semester in the major will be contingent upon positioning in the rank order list and satisfactory fulfillment of the hearing, language, speech and voice evaluation requirement.

Students may request that their application be reviewed at a later spring semester in their academic careers, with the understanding that completion of the degree may be delayed.

MAJOR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

In addition to the G.U.R.'s, Speech-Language Pathology and Audiology majors must complete 36 credits in required speech-language pathology and audiology courses. In order to remain in, continue in and graduate from the Speech-Language Pathology and Audiology major, students are required to maintain a grade of "C" (2.00) or better in both the theory and clinical courses, in addition to attaining the overall cumulative grade point average required by the university.

Requirements for the Major

Required Courses

36 semester hours from the following

- SPPA.105 Speech and Language Development (3)
- SPPA.210 Phonetics of American English (3)
- SPPA.300 Anatomy & Physiology of the Auditory & Vocal Mechanism (3)
- SPPA.301 Hearing & Speech Science (3)
- SPPA.302 Speech & Language Pathology I: Phonology (3)
- SPPA.304 Speech & Language Pathology II: Language (3)
- SPPA.305 Stuttering: Etiology & Therapy (3)
- SPPA.306 Speech & Language Pathology III: Organic Disorders (3)
- SPPA.321 Introduction to Audiology (3)
- SPPA.486 Clinical Observations & Techniques (3)
- SPPA.487 Clinical Practicum I (3)

Electives

- SPPA.213 General Semantics (3)
- SPPA.341 Clinical Audiology (3)
- SPPA.489 Clinical Counseling in Audiology & Speech Pathology (3)
- SPPA.496 Independent Study in Speech Pathology & Audiology (1-4)
- SPPA.497 Directed Readings in Speech Pathology and Audiology (1-4)

Student Liability Insurance

Students enrolled in Clinical Practicum are charged a yearly fee for mandatory student liability insurance.

DEPARTMENTAL ACTIVITIES

The department supports the National Student Speech-Language Hearing Association. Student participation in this organization is

encouraged. Several social events are scheduled each year so that students and faculty can meet informally.

Department of Health Science

Professors: ENSOR, GALLAGHER (*Chair*), OSMAN, SHEETS

Associate Professor: COOK-FULLER, J. McMAHON, RADIUS

Assistant Professors: ALT, M.J. McMAHON, RANDOLPH-PRINCE, ROYAKSCHALER, WENGERT

Instructor: AGLEY

OFFICE

Burdick Hall, Room 141, (301) 321-2378

PROGRAMS OF THE DEPARTMENT

The field of health science bridges the gap between scientific knowledge and discoveries in health and the application of that knowledge to daily life. The study of health science helps students select and develop healthy behavior patterns and concern for a healthy environment.

The department offers two majors: *Health Science* (three areas of concentration available) and *Medical Technology*. A concentration in Health Services Management for students majoring in General Studies is also available. (See the General/Liberal Studies section in this *Catalog*.)

MAJOR IN HEALTH SCIENCE

Health Science majors may pursue one of three areas of concentration: School Health Education, Community Health Education, and the combined School and Community Health Education.

Each of these concentrations provides students with the necessary background and instructional skills for professional positions in school health or community health education.

Students in the School Health Education Concentration and the combined School and Community Health Concentration must declare a Secondary Education major in addition to a Health Science major. Students majoring in these concentrations receive certification to teach at the secondary level. Health Science majors *must* contact the department chair to be assigned an advisor and receive a student handbook.

All students should meet with their advisors at the beginning of each semester to plan their course schedule for the following semester. To progress through the program, certain prerequisites must be taken in sequence before a student may complete student teaching and/or an internship.

In addition to completing major requirements, students must complete the General University Requirements.

Health Seminar (HLTH.402) fulfills the Group I-C advanced level writing course requirement.

Transfer Student Policy

A minimum of 30 hours must be completed at T.S.U.

Requirements for the Major

Courses required for each of the three concentrations within the Health Science major are listed below.

Community Health Education Concentration

The concentration in Community Health Education requires 44 credits in Health Science, and 21 credits in other disciplines. Stu-

dents must maintain a 2.00 GPA in all required courses. Students must also complete 15 credits of electives in an area of concentration, such as education, business, science or instructional technology. Students should consult their advisor regarding this requirement.

Required Course Sequence

Freshman Year

FIRST SEMESTER (16 credits)

HLTH.101 Current Health Problems (3)
 BIOL.110 Contemporary General Biology (4)
 PSYC.101 General Psychology (3)
 ENGL.102 College Writing (3)
 SOCI.101 Introduction to Sociology (3)

SECOND SEMESTER (15.5 credits)

MNGT.xxx Management Elective (3)
 Group II elective (3)
 Group III elective (3)
 Group III elective (3)
 PHEC.xxx Phys. Education Elective (.5)
 Group V elective (3)

Sophomore Year

FIRST SEMESTER (14 credits)

BIOL.213 Human Anatomy & Physiology I (4)
 MATH.237 Elem. Biostatistics (4)
 Group II elective (3)
 Group III elective (3)
 Group V elective (3)

SECOND SEMESTER (16.5 credits)

OCTH.213 Small Group Dynamics (3)
 BIOL.214 Human Anatomy & Physiology I (4)
 Group IV elective (3)
 Group III elective (3)
 Group III elective (3)
 PHEC.xxx Phys. Education elective (.5)

Required Courses in Health (44 credits)

HLTH.103 Emergency Medical Care (3)
 HLTH.107 Intro. to Health Professions (3)
 HLTH.201 Intro. to School Health (3)
 HLTH.202 Principles & Practices in Community Health (3)
 HLTH.207 Health Care in U.S. (3)
 HLTH.302 Prep. for Field Work (3)
 HLTH.422 Field Work (14)
 HLTH.402 Health Seminar (3)
 HLTH.xxx Health electives (9)

School Health Education Concentration

The concentration in School Health Education requires 27 credits in health science and 30 credits in education. Students must maintain a 2.00 grade point average with "C" work or better in all required courses. In addition to the required courses listed below, students must complete a three-credit upper-division elective.

Students who major in Health Science with the School Health Education concentration receive certification to teach at the secondary school level in Maryland upon graduation. Students are encouraged to consult with their advisor concerning certification requirements for additional academic fields.

Required Course Sequence

Freshman Year

FIRST SEMESTER (16.5 credits)

HLTH.101 Current Health Problems (3)
 BIOL.110 Contemporary General Biology (4)

PSYC.101 General Psychology (3)
 SOCI.101 Introduction to Sociology (3)
 ENGL.102 College Writing (3)
 PHEC.xxx Phys. Education elective (.5)

SECOND SEMESTER (16.5 credits)

CHEM.101 General Chemistry (4)
 SPCH.131 Fundamentals of Speech Communication (3)
 Group II elective (3)
 Group IV elective (3)
 Group V elective (3)
 PHEC.xxx Phys. Education elective (.5)

Sophomore Year

FIRST SEMESTER (17 credits)

BIOL.205 General Botany (or Biology elective) (4)
 BIOL.213 Human Anatomy & Physiology I (4)
 Group II elective (3)
 Group III elective (3)
 HIST.145 History of U.S. Mid 19th Cent. (3)
 or
 HIST.146 History of U.S. Since Mid 19th Cent. (3)

SECOND SEMESTER (16 credits)

BIOL.214 Human Anatomy & Physiology II (4)
 PSYC.201 Educational Psychology (3)
 Group V elective (3)
 Group III elective (3)
 HIST.xxx Course in Non-Western Culture (3)

Required Courses in Health (27 credits)

HLTH.103 Emergency Medical Care (3)
 HLTH.107 Intro. to Health Professions (3)
 HLTH.201 Intro. to School Health (3)
 HLTH.202 Principles & Practices in Community Health (3)
 HLTH.208 Mental Health (3)
 HLTH.301 Instructional Methodologies (3)
 HLTH.401 Sex Education & Family Life (3)
 HLTH.402 Health Seminar (3)
 HLTH.405 Drugs in Our Culture (3)

Required Education Core Courses (30 credits)

SCED.388 Student Teaching (14)
 SCED.401 Foundations (3)
 SCED.319 Survey of Educational Programs (3)
 or
 SCED.341 Principles of Secondary Education (3-4)
 SCED.414 Test & Measurements (3)
 SCED.460 Teaching Reading in the Secondary School (3)
 SPED.301 Intro. to Special Ed. K-12 (3)

School and Community Health Education Concentration

Students majoring in Health Science with this concentration must complete 72 credits of required courses. Students must maintain a 2.00 grade point average with "C" work or better in all required courses.

Students in this concentration may receive certification to teach at the secondary school level in Maryland upon graduation.

The School and Community Health Education concentration is designed to prepare students for employment in either the school or community health setting. Students planning a career in school health education should complete the Tests and Measurements course rather than Elementary Biostatistics. Students who plan to work in community health education should complete the Elementary Biostatistics course and are encouraged to participate in a 16-credit hour community health internship.

The completion of the School and Community Health Education concentration requires four-and-a-half years. Students who elect

to take a full semester of the community health internship, rather than an eight-week experience, will be extending their program to five years.

Required Course Sequence

Freshman Year

FIRST SEMESTER (16.5 credits)

HLTH.101	Current Health Problems (3)
BIOL.110	Contemporary General Biology (4)
PSYC.101	General Psychology (3)
ENGL.102	College Writing (3)
SOCI.101	Introduction to Sociology (3)
PHEC.xxx	Phys. Education elective (.5)

SECOND SEMESTER (16.5 credits)

CHEM.101	General Chemistry (4)
SPCH.131	Fund. of Speech Communication (3)
	Group V elective (3)
	Group II elective (3)
PHEC.xxx	Phys. Education elective (.5)
HIST.xxx	Course In Non-Western Culture (3)

Sophomore Year

FIRST SEMESTER (14 credits)

BIOL.205	General Botany (or Biology elective) (4)
BIOL.213	Human Anatomy & Physiology I (4)
	Group II elective (3)
	Group III elective (3)

SECOND SEMESTER (16 credits)

BIOL.214	Human Anatomy & Physiology I (4)
PSYC.201	Educational Psychology (3)
HIST.145	Hist. of U.S. to Mid 19th Century (3)
	or
HIST.146	Hist. of U.S. Since Mid 19th Century (3)
	Group III elective (3)

Required Courses in Health (38 credits)

HLTH.103	Emergency Medical Care (3)
HLTH.107	Intro. to Health Professions (3)
HLTH.201	Introduction to School Health (3)
HLTH.202	Principles & Practices in Community Health (3)
HLTH.208	Mental Health (3)
HLTH.301	Instructional Methodologies (3)
HLTH.302	Prep. for Field Work (3)
HLTH.421	Field Work (8)
HLTH.401	Sex Education & Family Life (3)
HLTH.402	Health Seminar (3)
HLTH.405	Drugs in Our Culture (3)

Other Required Courses (34 credits)

MNGT.xxx	Management Elective (3)
OCTH.213	Group Dynamics (3)
SCED.387	Student Teaching (8)
SCED.401	Foundations of Education (3)
SCED.319	Survey of Ed. Programs (3)
	or
SCED.341	Principles of Sec. Educ. (4)
EDUC.414	Tests & Measurements* (3)
	or
MATH.237	Elem. Biostatistics (4)
SCED.460	Teaching Reading in the Secondary School (3)
SPED.301	Intro. to Special Education K-12 (3)

*Students taking this course must take an additional Group IV elective in order to satisfy GUR's.

Honorary Society

Eta Sigma Gamma is the national professional honorary society in Health Science (education). The organization's principle purpose is to elevate the standards, ideals, competence and ethics of professionally trained men and women in the discipline of health science.

For additional information on Eta Sigma Gamma or membership requirements, contact the Health Science office (BU 41) at 321-2637.

Health Science Recognition Award

This award is presented in the spring to an outstanding Health Science major at graduation.

Graduate Program

Two graduate programs are also offered by the department: the *Master of Science degree with specialization in School Health Education or Community Health Education and Administration*, and the *Master of Education in School Health*. These programs present facts, theories and principles basic to the science of health education as well as in the supporting biological, behavioral, sociological and educational areas. For more information about these graduate programs, see the *Graduate School Catalog*.

MAJOR IN MEDICAL TECHNOLOGY

Director: DR. NEIL E. GALLAGHER

Union Memorial Hospital Faculty

Director: RICHARD R. GRAHAM, M.D.

Educational Coordinator: ROBERT E. DURELL, M.T. (ASCP)

Pathologists: CARLOS ORBEGOSO, M.D., ALI DANESHVAR, M.D., DANIEL SYMONDS, M.D.

Assistant Educational Coordinator: JAY DAMON M.T. (ASCP)

Washington Hospital Center Faculty

Medical Director: Mary Kass, M.D.

Program Director: Michele Best, M.T. (ASCP)

A career in medical technology can be both stimulating and rewarding since the field is rapidly growing with advances in medical science. The medical technologist works under the supervision of a pathologist in a laboratory and performs tests on which doctors rely for assistance in diagnosing or treating diseases. Graduates of Towson State's Medical Technology program are also prepared to work as supervisors, instructors of supportive lab personnel, and researchers.

The Department of Health Science offers a four-year program in Medical Technology designed to prepare allied health personnel for specialized work in hospital and medical laboratories while they earn a Bachelor of Science degree in Medical Technology. It provides background for the student to pass any of the Registry Exams including the one administered by the Board of Registry of the American Society of Clinical Pathologists. During the first three years, there is special emphasis on chemistry and biology. The fourth year consists of specialized classes and practical training in clinical laboratories of an affiliated hospital (Union Memorial, or another appropriate hospital designated by Towson State University). As of December, 1973, students are not admitted to the Registry Exam without a baccalaureate degree.

The Medical Technology Program is accredited by the Committee on Allied Health Education and Accreditation (CAHAE) of the American Medical Association in cooperation with the National Accrediting Agency for Clinical Laboratory Services (NAACLS).

Majors are required to fulfill all college requirements, including: Bachelor of Science degree requirements; General University Requirements; and requirements for the major in Medical Technology. Students must attain a grade of "C" or better in all courses required for the major. Of the 120 credit hours required for graduation, 90 hours are to be completed at Towson State University (transfer students must complete a minimum of 30 credit hours at Towson State University and of the 30, eight should be in biology and eight should be in chemistry).

During the fourth year, 33 credit hours of courses are completed at Union Memorial or another appropriate hospital designated by Towson State University. Before beginning the fourth year of the program at an affiliated hospital, each student must have at least a 2.00 cumulative average, a minimum of grade "C" in all biology and chemistry courses and be accepted by the respective hospital's screening committee. Students must also fulfill all General University Requirements prior to senior year internship.

ADMISSION TO THE MAJOR/SCREENING

The Medical Technology program has a limited number of clinical experience placements. This limited number of placements has necessitated the implementation of the following procedures:

In order to be considered for tentative acceptance into the program, students must have completed eight semester hours of biology, eight semester hours of chemistry, and a total of 45 semester hours. By the end of their third semester (or upon meeting the above requirements), students must declare their interest in majoring in Medical Technology.

Each application will be reviewed according to the following criteria:

- Total academic record. Overall grade point averages for students verified will be placed in a rank order. Grades in science courses will also be considered separately.
- General progress toward a baccalaureate degree (this includes General University Requirements and other courses specifically related to medical technology). After three semesters of full-time work or the equivalent, a student should have completed 50% of the General University Requirements. After four semesters of full-time work or the equivalent, a student should have completed 70% of the General University Requirements. Extenuating circumstances affecting general progress toward a degree will be considered.

Before beginning the fourth year of the program (clinical internship), each student must apply and be accepted by the respective hospital's screening committee.

Application to the hospitals are made early in the spring semester. In order to be eligible to apply, students must be able to complete all requirements of the program and General University Requirements during the spring semester.

Requirements for the Major

Required Courses

BIOL.110	Contemporary General Biology (4)
BIOL.213	Human Anatomy & Physiology I (4)
BIOL.214	Human Anatomy & Physiology II (4)
BIOL.315	Medical Microbiology (4)
CHEM.101	General Chemistry I (4)
CHEM.102	General Chemistry II (4)
CHEM.210	Principles & Methods of Chemical Analysis (4)
CHEM.330	Essentials of Organic Chemistry (5)
HLTH.101	Current Health Problems (3)
MATH.115	Basic Mathematics for the Sciences (3)
MATH.237	Elementary Biostatistics (4)
PHYS.211	General Physics I (4)

Required by Hospitals, (NAACLS) and (CEAHEA)

BIOL.421	Immunology (3)
CHEM.350	Principles of Biochemistry (5)

Recommended for the Major

BIOL.335	Animal Parasitology (4)
BIOL.401	Genetics (4)
HLTH.204	Elements of Nutrition (3)
HLTH.311	Chronic and Communicable Disease (3)

Required Courses for Senior Internship

MDSC.401	Immunohematology and Blood Bank Lecture (3)
MDSC.402	Immunohematology and Blood Bank Practical (1.5)
MDSC.403	Clinical Biochemistry Lecture (4)
MDSC.404	Clinical Biochemistry Practical (3)
MDSC.405	Hematology Lecture (3)
MDSC.406	Hematology Practical (3)
MDSC.407	Clinical Pathology (1)
MDSC.408	Clinical Pathology Practical (1)
MDSC.409	Microbiology Lectures (3)
MDSC.410	Microbiology Practical (3)
MDSC.411	Human Parasitology Lecture (1)
MDSC.412	Human Parasitology Practical (1)
MDSC.413	Clinical Immunology Lecture (2)
MDSC.414	Immunodiagnostic Practical (1, 5)
MDSC.415	Urinalysis Lecture (1)
MDSC.416	Urinalysis Practical (1)

Department of Nursing

Associate Professors: BELL (*Chair*), DAMRATOWSKI, DAVIES, FORDYCE

Assistant Professors: BARRETT-COTLER, CRABILL, ELLER, HARRELL, JORDAN, KEENEN, LASHLEY, LEE, MIDKIFF, MOLLICK, MUNDY, STERN, TAYLOR, WILEY

OFFICE

Burdick Hall, Room 109, (301) 321-2067

PROGRAMS OF THE DEPARTMENT

Nursing is both an art and a science with an evolving body of specialized knowledge derived from nursing research as well as from the synthesis of knowledge from related disciplines. Nursing, independently or collaboratively, guides and/or influences the behavior of others in their efforts toward optimizing the health status of individuals, families, groups, and communities.

Towson State offers a program in professional nursing leading to the Bachelor of Science degree with a major in Nursing. The nursing curriculum includes courses in the liberal arts, the sciences, and nursing. The curriculum, designed for generic and registered nurse students, prepares the graduate to accept responsibility and accountability for the care of clients and families in a variety of health care settings, to function in beginning leadership roles, and to be consumers of and participants in nursing research. Students are also provided with the foundation for graduate study in nursing.

The nursing program is approved by the Maryland State Board of Examiners of Nurses and accredited by the National League for Nursing. Generic students graduating from the Nursing major are eligible to write the State Board Examination for licensure as a

Registered Nurse. The Department of Nursing holds membership in the American Association of Colleges of Nursing, the Council of Baccalaureate and Higher Degree Programs of the National League for Nursing, and the Council on Collegiate Education in Nursing of the Southern Regional Education Board.

MAJOR IN NURSING: GENERIC STUDENTS

The university requires a minimum of 120 credits for graduation. However, established departmental requirements must also be completed for graduation with a Nursing major. This necessitates completion of 127 credit hours for most students enrolled in the department.

Nursing courses must be completed in a sequential pattern, as each course is foundational to the subsequent course.

All courses listed in the freshman and sophomore years of the Nursing curriculum outline must be completed prior to enrolling in the first junior-level nursing course.

Pre-nursing students demonstrating competencies covered in MATH.115 (as determined by the Mathematics Department) may enroll in an alternative offering of one of the following: MATH.116; MATH.119, or MATH.273, in order to meet the mathematics requirement. Placement in the particular course is determined by the Mathematics Department.

As these requirements may be revised from time to time, it is the student's responsibility to make certain that he or she is working with the most current outline.

Requirements for the Major

Required Course Sequence

Freshman Year

FIRST SEMESTER

- #ENGL.102 College Writing (3)
- #BIOL.110 Contemporary General Biology (4)
- #CHEM.105 Chemistry for Allied Health Professions I (4)
- #MATH.115 Basic Mathematics for Sciences (3)
- PHEC.xxx Physical Education elective (1)

SECOND SEMESTER

- #SOCI.101 Introductory Sociology (3)
- BIOL.315 Medical Microbiology (4)
- #PSYC.101 General Psychology (3)
- CHEM.106 Chemistry for Allied Health Professions II (4)
- *Group II elective (3)

Sophomore Year

FIRST SEMESTER

- BIOL.213 Human Anatomy and Physiology I (4)
- PSYC.203 Human Development
- **HLTH.331 Nutrition for Health Professionals (3)
- *Group III elective (3)
- *Group V elective (3)

SECOND SEMESTER

- BIOL.214 Human Anatomy and Physiology II (4)
- NURS.201 Concepts of Nursing I (3)
- NURS.203 Nursing: Client Health Maintenance and Promotion (3)
- *Group II elective (3)
- *Group III elective (3)

Junior Year

FIRST SEMESTER

- NURS.301 Concepts of Nursing II (3)
- NURS.303 Pharmacopathophysiologic Implications for Nursing Practice

- NURS.305 Nursing: Health Assessment (I)
- NURS.307 Nursing: Psychomotor Skills (1)
- ***NURS.309 Nursing: Family System Membership Change (6)
- or
- NURS.313 Nursing: Client Physiological Disequilibrium (6)
- *Group III elective (3)

SECOND SEMESTER

- ***NURS.313 Nursing: Client Physiological Disequilibrium (6)
- or
- NURS.309 Nursing: Family System Membership Change (6)
- NURS.315 Nursing: Client Behavioral Disequilibrium (6)
- MATH.237 Elementary Biostatistics (4)

Senior Year

FIRST SEMESTER

- #NURS.401 Concepts of Nursing III: Interdisciplinary Systems Approach to Health Care Delivery (3)
- NURS.403 Nursing: Client Care in a Community Environment (6)
- NURS.405 Nursing: Complex Care for Adults and Children (6)

SECOND SEMESTER

- #NURS.407 Nursing: Advanced Concepts and Issues (9)
- *Group III elective (3)
- *Group V elective (3)

#These courses meet general university requirements and are required for the nursing major.

*A maximum of 12 credits from these courses may be taken under the pass option plan.

**This course satisfies a Group V GUR (field of study #7) for Nursing Majors only.

***Credit for both courses must be earned, but the student may take either course in the fall or spring semester of the junior year.

Admission to the Major — Screening

Students must have completed the following courses at the high school level to provide the base necessary to complete the prerequisite courses for the Nursing major: mathematics—3 units (two years of algebra and one year of geometry); chemistry—1 unit; biology—1 unit. Physics, although not required, is recommended.

Before a student can be considered for admission to the Nursing major, he or she must be admitted to or have applied for admission to the university. Transfer students must adhere to the university's transfer policy.

Admission to the Nursing major is made *only* by the Departmental Admissions, Continuance and Dismissal Committee. Admission to the University does not constitute or guarantee admission to the major. Forty students are admitted in both the Fall and Spring semesters of each academic year. The Application for Admission to the Nursing Major is available from the Department of Nursing office.

As indicated in the curriculum outline, the Nursing major at Towson State requires five semesters of study in the Department of Nursing. Admission to the major is contingent upon the student's being screened and admission being offered to the applicant by the Departmental Admissions, Continuance and Dismissal Committee. The screening process takes place during the semester prior to the student's anticipated enrollment in the first Nursing course. At the time of screening, students should have at least sophomore status; that is, a minimum of twenty-eight credits which are applicable to the Nursing major curriculum must have been completed and at least three of the courses completed must be in the required physical sciences. Based on credits being applied toward the major, a minimum grade point average of 2.5 on a 4.0 scale is required; however, students must note that achievement at the 2.5 level in itself does not guarantee admission to the Pro-

gram. Applicants will be required to comply with further procedures as outlined in the Application Information pamphlet.

MAJOR IN NURSING: REGISTERED NURSE STUDENTS

Several options are available to RNs for the completion of baccalaureate degree requirements. One of these options is the Validation Model as mandated by the Governor of the State of Maryland in 1985. All options include credit for previous learning, a broad base in the liberal arts, and Nursing courses which are designed to enhance professional nursing practice. Since RN students represent a variety of learning and practice experiences, every effort is made to design an individual program which will meet the learning needs of the student while, at the same time, offer a curriculum which provides the foundation for nursing practice at the baccalaureate level.

Therefore, RNs are advised to contact the Department of Nursing's RN Coordinator for advisement and assistance with admission and program planning.

Whichever individual program is planned, all RN students are required, as a minimum, to take the following Nursing courses in addition to courses in the liberal arts and sciences:

- NURS.301 Concepts of Nursing II (3)
- NURS.305 Nursing: Health Assessment (1)
- NURS.401 Concepts of Nursing III: Interdisciplinary Systems Approach to Health Care Delivery (3)
- NURS.403 Nursing: Client Care in a Community Environment (6)
- NURS.407 Nursing: Advanced Concepts and Issues (9)
- NURS.xxx Nursing Elective (3)

Admission to the Major/Screening

Students must have graduated from a state-approved diploma or associate degree nursing program and be licensed as a Registered Nurse in Maryland to be eligible for admission into the RN Program. Recent graduates may be admitted pending successful completion of the State Board licensing examination.

Registered Nurse students are to contact the RN Coordinator in the Department of Nursing *prior* to completion and submission of the application for admission to the University. Students applying for admission to the Nursing major must either have been admitted to the University or be currently seeking admission to the University.

Admission to the Nursing program is granted only by the Departmental RN Committee. Students are admitted to the Nursing Program twice a year. Forty RN students may be admitted in the fall semester and forty RN students may be admitted in the spring semester. Applications for admission are available from the Department of Nursing office.

ACADEMIC STANDARDS

In order to remain in and graduate from the Nursing major, students are required to maintain a grade of "C" (2.0) or better in both the theory and clinical component in each Nursing course, in addition to maintaining a 2.0 overall cumulative Grade Point Average.

SPECIAL FINANCIAL OBLIGATIONS

All students in the Nursing major are required to:

- carry nursing student liability insurance through the university;
- carry hospitalization insurance including accident and/or emergency benefits;
- purchase departmental uniforms and supplies (approximately \$700 for generic students and \$200 for RN students)
- have a valid driver's license and access to the independent use of a car in order to provide own travel to and from clinical facilities;

—pay certain lab fees associated with the major (currently, the fee is approximately \$10 for the entire program; however, this fee is subject to change without notice).

Information about financial assistance may be obtained from the university's Office of Financial Aid.

Department of Occupational Therapy

Associate Professors: BLOUNT (Chair)

Assistant Professors: BLAKE, CANNELLA, ESKOW, EXNER, MELVIN, PARMENTER, STEVENS-RATCHFORD

OFFICE

Lida Lee Tall, Room 305, (301) 321-2640

PROGRAMS OF THE DEPARTMENT

Occupational therapy is the art and science of directing human participation in selected tasks to restore, reinforce and enhance performance, facilitate learning of skills and functions essential for adaptation and productivity, to diminish or correct pathology, and to promote and maintain health. Occupational therapists direct the use of self-care, work, homemaking, play and leisure activities. They use these activities to assist individuals or groups whose health is threatened or impaired by developmental deficits, aging, poverty and environment conditions, physical injury or illness, and psychological and social disability.

The Department of Occupational Therapy offers both a *four-year program* and a *Junior Entry program of study in Occupational Therapy* designed to provide a liberal education and develop professional competence. Both programs of study lead to a baccalaureate degree in Occupational Therapy. The Occupational Therapy Program is accredited by the Committee on Allied Health Education And Accreditation of the American Medical Association in conjunction with the Accreditation Committee of the American Occupational Therapy Association. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the American Occupational Therapy Certification Board. After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Many states require licensure in order to practice; however, state licenses are usually based on the results of the AOTCB Certification Exam.

The department also offers the *Master of Science in Occupational Therapy*.

Affirmative Action Policy

Towson State University does not discriminate on the basis of race, national origin, religion, color, sex, age, or condition of handicap in its academic program. Some groups, however, have been historically underrepresented in the field of occupational therapy. Therefore, factors such as sex, race, and handicapping conditions may be considered during all phases of the admission and screening process for the Occupational Therapy program. Candidates representing minority populations, men, and the handicapped will be given special consideration if they show evidence of high motivation and adequate academic ability to meet the demands of the program.

Permit Cards

Special permit cards are required for admission to all occupational therapy major courses.

First Aid Course Recommended

It is highly recommended that students complete a standard course in First Aid before graduation.

PRE-ADMISSION REQUIREMENTS FOR ALL CANDIDATES

Students interested in becoming Occupational Therapy majors must first gain admission to Towson State University. Admission to the university does not guarantee admission to the Occupational Therapy major. Occupational Therapy faculty will advise potential students about the nature of the profession, the national certification examination and the occupational therapy curriculum prior to this admission at the request of the student. This prior contact is highly recommended particularly since admission to the major is competitive and the class size in occupational therapy is limited.

Following admission to the university, the student is REQUIRED to visit the Occupational Therapy office for an orientation meeting if this has not been undertaken previously.

MAJOR IN OCCUPATIONAL THERAPY FOUR-YEAR PROGRAM

The "pre-admission requirements" listed above must be met by all candidates.

For initial admission to the pre-occupational therapy majors list for entry into the four-year program: Admissions information on all applicants for the freshman year of the Occupational Therapy program will be reviewed shortly after April 1 each year.

1. For students entering directly from high school, admission will be based on high school grade point average and the following scores: SAT—verbal, SAT—math, and the TSWE, if it is available.
2. Students who have earned college or university credits, either at Towson State University or another institution, will be ranked with students entering from high school, according to cumulative grade point average in completed college or university courses.

From all candidates for the four-year program arranged in this rank order, the top forty-two candidates will be selected to enter the first year of the program.

Screening

Thirty students shall be accepted into the Occupational Therapy program at the end of the first year. The screening process requires the use of grade point average for prerequisite courses and a brief paper written by the student based primarily on experiences of the student in OTH.101, Introduction to Occupational Therapy, or an equivalent course.

Prerequisites to be completed before screening include: Contemporary General Biology BIOL.110, General Psychology PSYC.101, Intro. to Sociology SOCI.101, College Writing ENGL.102, Introduction to Occupational Therapy OTH.101, and Bio-Psycho-Social Development OTH.116. General Physics B PHYS.201 is highly recommended before screening.

Requirements for the Major

In addition to the General University Requirements, Occupational Therapy majors must complete 47 credits in occupational therapy courses, 16 credits in other required courses, and 18 credits in clinical internships. The total number of credits required for graduation is 134.

Students must maintain the cumulative grade point average required by the university. A "D" grade in a required course will not count for major credit. A student receiving a "D" grade may retake the course once to improve his or her standing.

Required Course Sequence

Freshman Year

FIRST SEMESTER (16.5 credits)

BIOL.110	Contemporary General Biology (4)
PSYC.101	General Psychology (3)
SOCI.101	Introduction to Sociology (3)
ENGL.102	College Writing (3)
PHEC.xxx	Physical Education elective (.5) Group II elective (3)

SECOND SEMESTER (14.5 credits)

PHYS.201	General Physics B (5)
OCTH.101	Introduction to Occupational Therapy (3)
OCTH.116	Bio-Psycho-Social Development (3)
PHEC.xxx	Physical Education elective (.5) Group II elective (3)

Sophomore Year

FIRST SEMESTER (17 credits)

BIOL.213	Human Anatomy & Physiology I (4)
OCTH.211	Philosophy of Occupational Therapy (3)
OCTH.217	Task Analysis I (4)
PSYC.350	Personality (3)
HLTH.207	Health Care in the U.S. (3)

SECOND SEMESTER (16 credits)

BIOL.214	Human Anatomy & Physiology II (4)
BIOL.427	Neuromuscular Mechanisms of the Upper Body (2)
OCTH.218	Task Analysis II (4)
OCTH.213	Small Group Dynamics (3)
OCTH.221	Clinical Kinesiology (3)

Junior Year

FIRST SEMESTER (18 credits)

OCTH.313	Principles of Physical Disabilities (3)
OCTH.315	Pathological Conditions I (3)
OCTH.319	Physical Dysfunction Practicum (2)
OCTH.325	Pediatric Occupational Therapy (4)
PSYC.361	Abnormal Psychology (3) Group III elective (3)

SECOND SEMESTER (16 credits)

OCTH.314	Principles of Psychosocial Dysfunction (4)
OCTH.316	Pathological Conditions II (3)
MATH.237	Elementary Biostatistics (4)
OCTH.320	Psychosocial Dysfunction Practicum (2) Group V elective (3)

Senior Year

FIRST SEMESTER (16 credits)

OCTH.428	O.T. Organization and Administration (3)
OCTH.429	Seminar in Occupational Therapy (1)
OCTH.430	Research Methods in Occupational Therapy (3) Group III elective (3) Group III elective (3) Group V elective (3)

SECOND SEMESTER (14 credits)

OCTH.435	Occupational Therapy Internship I (7)
OCTH.436	Occupational Therapy Internship II (7)

In addition to the above courses, students are required to take two courses, Group III General University Requirements, during

regular, summer or minimester sessions as appropriate in individual circumstances.

MAJOR IN OCCUPATIONAL THERAPY JUNIOR ENTRY PROGRAM

Fifteen students will be admitted to the Occupational Therapy program beginning at the third year level.

The "pre-admission" requirements listed above must be met by all candidates. Students must declare their interest in the major by placing their names on a Candidates List after completing the "preadmission requirements."

All prerequisite courses for admission to the Junior Entry program must be completed with grades of "C" or better by the end of the spring semester in the year for which application is made.

All candidates for the Junior Entry program will be ranked according to cumulative grade point average in all college or university level courses, and, shortly after April 1 of each year, the top fifteen candidates will be selected for the Junior Entry program which will begin in the fall semester of that year.

Requirements for the Major

In addition to the General University Requirements, Occupational Therapy majors must complete 47 credits in occupational therapy courses, 16 credits in other required courses, and 18 credits in clinical internships. The total number of credits usually required for graduation is 134.

Students must maintain the cumulative grade point average required by the university. A "D" grade in a required course will not count for major credit. A student receiving a "D" grade may retake the course once to improve his or her standing.

A student is admitted to this program with 48 credits, grades "C" or above, including courses in English Composition, Introductory Biology, General Psychology, Introductory Sociology, Abnormal Psychology or Personality Theory, Basic Statistics, Physics, including mechanics, and two courses in Human Anatomy and Physiology.

Screening takes place before admission to the junior year. Students must meet General University Requirements. This may necessitate taking a heavier course load during the professional program or during summer semesters.

Required Course Sequence

SEMESTER ONE (16 credits)

- OCTH.101 Introduction to Occupational Therapy (3)
- OCTH.116 Bio-Psycho-Social Development (3)
- OCTH.217 Task Analysis I (4)
- OCTH.213 Small Group Dynamics (3)
- HLTH.207 Health Care in the U.S. (3)

SEMESTER TWO (15 credits)

- OCTH.211 Philosophy of Occupational Therapy (3)
- OCTH.218 Task Analysis II (4)
- OCTH.221 Clinical Kinesiology (3)
- BIOL.427 Neuromuscular Mechanisms of the Upper Body (2)
- PSYC.350 Personality (3)
- or
- PSYC.361 Abnormal Psychology (3)
- (Both courses must be completed)

SEMESTER THREE (15 credits)

- OCTH.313 Principles of Physical Disabilities (3)
- OCTH.315 Pathological Conditions I (3)
- OCTH.319 Physical Dysfunction Practicum (2)
- OCTH.325 Pediatric Occupational Therapy (4)
- OCTH.428 O.T. Organization and Administration (3)

SEMESTER FOUR (16 credits)

- OCTH.314 Principles of Psychosocial Dysfunction (4)
- OCTH.316 Pathological Conditions II (3)
- OCTH.320 Psychosocial Dysfunction Practicum (2)
- OCTH.429 Seminar in Occupational Therapy (1)
- OCTH.430 Research Methods in Occupational Therapy (3)
- Any Elective Course (3)

SUMMER (7 credits)

- OCTH.435 Occupational Therapy Internship I (7)

SEMESTER FIVE (7 credits)

- OCTH.436 Occupational Therapy Internship II (7)

MASTER OF SCIENCE IN OCCUPATIONAL THERAPY

The Master of Science in Occupational Therapy is designed for registered occupational therapists who are interested in advanced training in pediatrics, geriatrics or adult physical dysfunction with emphasis on teaching, research, clinical practice, or administration. For further information consult the *Graduate School Catalog*.

Department of Physical Education

Professors: EASON (Chair), MEINHARDT, ZEIGLER

Associate Professors: BLANN, BOUCHER, BOUTON, FAULKNER, McDONALD, MYRANT, RIORDON, SLEVIN, STINAR

Assistant Professors: ANGOTTI, BRITT, FIELD, FINCH, FORBES, KENNARD, RUNK

Instructor: Parr

OFFICE

Towson Center, Room 200, (301) 321-2376

PROGRAMS OF THE DEPARTMENT

The Department of Physical Education offers the following programs: *General University Requirements* and electives; the *Physical Education Teacher Education program*, for students planning to teach physical education at the elementary and secondary levels; the *Physical Education Sport Studies program*; and the *Athletic Coaching Emphasis Area* for non-majors.

MAJOR IN PHYSICAL EDUCATION: TEACHER EDUCATION PROGRAM

Towson State University's Teacher Education program prepares competent teachers in physical education for elementary and secondary schools. Graduates are certified to teach at the elementary and secondary levels. A planned sequence of courses is designed to provide the student with skills and leadership experience needed to direct a balanced program in class, intramural and extramural activities and varsity sports.

Students majoring in Physical Education Teacher Education must complete 27 credits in required professional theory courses, 14-15 courses in required professional laboratory skill courses, and 15 credits of elective courses in physical education. Additionally, the student must complete 43 credits in courses required by the State Department of Education for teacher certification. Students must complete all courses required for the major (PHEC) with a grade

of "C" or higher. In addition, the following professional education courses must be completed with a grade of "C" or higher and a cumulative GPA of 2.75: Educational Psychology, PSYC 201; Survey of Educational Programs, SCED 319; Teaching PE in Elementary School, PHEC 324; Teaching PE in Secondary School, PHEC 325; Foundations of Education, EDUC 401; Adaptive Physical Education, PHEC 423.

The department also offers two areas of concentration that may be completed within the Physical Education Teacher Education program or in conjunction with another major. These concentrations are: "Athletic Training" and "Outdoor Education." An emphasis area in Health Science is also available for students who wish to be certified to teach physical education and health education at the elementary and secondary levels.

Screening Procedures

Formal procedures and requirements must be met before a student may be admitted to the university's teacher education programs. For specific information about screening procedures see the section on "Admission to Professional Education Programs" in the College of Education.

Requirements for the Major

Professional Theory Courses (27 credits)

- PHEC.299 Overview of Physical Education (2)
- PHEC.303 Organization & Administration of Ph. Ed. (3)
- PHEC.309 Tests & Measurements in Physical Ed. (3)
- PHEC.311 Kinesiology (4)
- PHEC.313 Physiology of Exercise (3)
- PHEC.315 Care & Prevention of Athletic Injuries (3)
- PHEC.324 Teaching Physical Education in Elementary School (3)
- PHEC.325 Teaching Physical Education in Secondary School (3)
- PHEC.423 Adapted Physical Education (3)

Professional Laboratory Skills (14-15 courses)

Professional laboratory skill courses (111-284) provide instruction in the basic activities appropriate for a teacher of physical education, including acquisition of skills and methods of instruction. Specific courses are required in the following categories:

Team Sports—three courses

Individual/dual activities—five-six courses

Aquatics—two courses (according to placement test)

Dance—two courses

Elementary Activities—two courses

Course outlines and prerequisites are available in the Department of Physical Education office.

A list of required (*) and elective professional laboratory skills courses follows:

- PHEC.111 Archery I (0.5)
- *PHEC.113 Badminton I (0.5)
- PHEC.201 Baseball I (0.5)
- PHEC.203 Basketball I (0.5)
- PHEC.115 Bicycle Touring (0.5)
- PHEC.118 Body Mechanics (0.5)
- PHEC.119 Bowling I (0.5)
- PHEC.121 Conditioning I (0.5)
- PHEC.125 Fencing I (0.5)
- *PHEC.207 Field Hockey I (0.5)
- PHEC.170 Folk Dance I (0.5)
- PHEC.209 Football I (0.5)
- PHEC.127 Golf I (0.5)
- *PHEC.129 Gymnastics I (tumbling) (0.5)
- *PHEC.130 Gymnastics II (apparatus) (0.5)
- PHEC.131 Handball (0.5)
- PHEC.134 Jogging (1.0)
- PHEC.155 Rhythmic Aerobics (1.0)

- *PHEC.215 Lacrosse I (0.5)
- PHEC.143 Self Defense I (0.5)
- *PHEC.221 Soccer I (0.5)
- PHEC.172 Social Dance I (0.5)
- PHEC.223 Softball I (0.5)
- *PHEC.160 Swimming I (according to placement tests) (0.5)
- *PHEC.161 Swimming II (according to placement tests) (0.5)
- *PHEC.179 Tennis I (0.5)
- *PHEC.149 Track & Field I (0.5)
- *PHEC.228 Volleyball I (0.5)
- PHEC.151 Wrestling (0.5)
- *PHEC.279 Techniques of Teaching Creative Movement (1.0)
- *PHEC.283 PHEC Activities for the Young Child (K-3) (1.0)
- *PHEC.284 PHEC Activities for the Intermediate Grades (4-6) (1.0)

Electives (15 credits)

Fifteen credits in physical education theory and professional laboratory skills courses from the remaining courses available in the department are required. Three of the elective credits must be in professional lab skills.

Required for Teacher Education Certification Courses (42-43 credits)

- BIOL.110 Contemporary General Biology (4)
- PHYS.201 General Physics B (5)
- or
- CHEM.105 Chemistry for Allied Health Professions I (4)
- HLTH.101 Current Health Problems (3)
- PSYC.201 Educational Psychology (3)
- BIOL.213 Human Anatomy & Physiology I (4)
- BIOL.214 Human Anatomy & Physiology II (4)
- SCED.319 Survey of Education (3)
- EDUC.401 Foundations of Education (3)
- ELED.392 Elementary Student Teaching (8)
- SCED.392 Secondary Student Teaching (6)

TEACHER EDUCATION/ATHLETIC TRAINING CONCENTRATION

It is required that the student complete requirements for a K-12 teaching certificate in physical education. Most positions currently available in athletic training are in secondary schools, and usually include teaching responsibilities as well as trainer responsibilities.

Students intending to pursue the athletic trainer curriculum should contact the Physical Education Department to obtain admission to the program and information regarding screening procedures.

Required Courses and Experiences in Addition to Teacher Education

- PHEC.335 Principles & Techniques of Wrapping and Taping (1)
- PHEC.391 Practicum in Athletic Training I (1)
- PHEC.415 Advanced Care and Prevention of Athletic Injuries (3)
- PHEC.416 Therapeutic Techniques in Sports Medicine (4)
- PHEC.417 Organization and Administration of Athletic Training (3)
- PHEC.491 Practicum in Athletic Training II (1)
- HLTH.331 Nutrition for Health Professionals (3)
- PSYC.309 Behavioral Pharmacology (3)

CPR Certification

1800 hours (minimum) clinical experience under supervision of a certified athletic trainer to be completed over a minimum period of two years. Students must successfully complete NATA exam to receive Athletic Training Certification.

OUTDOOR EDUCATION TRACK

Recommended Courses (11 credits)

- PHEC.135 Overview of Adventure Education (3)
- PHEC.305 Outdoor Education: Philosophy & Methods (3)
- PHEC.245 Camp Leadership (2)
- PHEC.397 Practicum in Camping or Outdoor Education (3)

Laboratory Skills Courses (4 credits)

4 credits selected from the following

- PHEC.123 Elementary Backpacking (1)
- PHEC.164 Canoeing (.5)
- PHEC.008 Cross Country Skiing (minimester) (1)
- PHEC.141 Basic Rock Climbing (1)
- PHEC.137 Orienteering (.5)
- PHEC.115 Bicycling (.5)
- PHEC.166 Basic Sailing (1)
- PHEC.263 Scuba Diving (1)

Student Teaching in Outdoor Education (3-7)
(in addition to student teaching in a major field)

Health Science Certification

Required Courses (24 credits)

- HLTH.103 Emergency Medical Care (3)
- HLTH.201 Introduction to School Health (3)
- HLTH.208 Mental Health (3)
- HLTH.301 Instructional Methodology in School Health (3)
- HLTH.331 Nutrition for Health Professionals (3)
- HLTH.401 Sex Education and Family Life (3)
- HLTH.405 Drugs In Our Culture (3)
- SCED.399 Differentiated Student Teaching—Secondary (Health) (3)

MAJOR IN PHYSICAL EDUCATION: SPORT STUDIES PROGRAM

The Sport Studies program focuses on a humanistic view of sports and physical activity. The program provides a range of interdisciplinary study options leading to preparation for graduate study in a sub-discipline of physical education, or employment in sports related positions within the business community.

Three areas of concentration are offered in the major: Sports Management, Sports Communication, and Psychology of Sport and Physical Activity.

Students in the program are required to complete 15 credits in Sport Studies core courses, six courses in sport and physical activity courses, and 41-42 credits in required and elective courses in one of the three areas of concentration.

Students must complete all courses required for the major (including the area of concentration) with a grade of "C" or higher.

Requirements for the Sport Studies Program

Sport Studies Core (15 credits)

- PHEC.341 Concepts of Motor Learning (3)
- PHEC.351 Philosophy: The Sport Experience (3)
- PHEC.353 Sport & Society (3)
- PHEC.355 Psychology of Sport (3)
- PHEC.451 History of American Sport (3)

Sport and Physical Activity Courses (3 credits)

Courses are required in the following categories:

- Individual Sports—two courses (see list below)
- Team Sports—two courses (see list below)
- Remaining credit to be selected from the entire list of PHEC. activity course offerings, major or non-major sections.

Individual Sports

- Archery
- Badminton
- Billiards
- Bowling
- Fencing
- Golf
- Gymnastics
- Handball
- Racquetball
- Sailing
- Squash Racquets
- Swimming
- Tennis
- Track and Field
- Wrestling

Team Sports

- Baseball
- Basketball
- Field Hockey
- Football
- Team Handball
- Lacrosse
- Rugby
- Soccer
- Softball
- Volleyball
- Water Polo

Sports Management Concentration

In addition to the sports studies core and activity requirements stated above, the student electing this option must complete the requirements below.

Required Courses (27 credits)

- ACCT.201 Principles of Accounting I (3)
- ACCT.202 Principles of Accounting II (3)
- ACCT.225 Business Law I (3)
- MKTG.341 Principles of Marketing (3)
- MKTG.345 Advertising Management (3)
- or
- MCOM.353 Publicity and Public Relations (3)
- MNGT.361 Management Theory (3)
- HRM.381 Human Resource Administration (3)
- MNGT.497 Practicum in Management (3)
- PHEC.453 Organization & Administration of Athletics (3)

Electives

15 credits selected from the following

- PHEC.007 Cardiovascular Fitness (3)
- PHEC.235 Individualized Fitness (3)
- PHEC.245 Camp Leadership (2)
- and
- Sport/Physical Activity (1)
- PHEC.301 Recreation (3)
- PHEC.302 Curriculum in PHEC (3)
- PHEC.303 Organization & Administration of PHEC (3)
- or
- 403 Organization & Administration of Intramurals (3)
- PHEC.305 Outdoor Educ.: Phil. & Methods (3)
- PHEC.309 Tests & Measurements (3)
- PHEC.311 Kinesiology (4)
- PHEC.313 Physiology of Exercise (3)
- PHEC.315 Care & Prevention of Athletic Injuries (3)
- PHEC.331 Principles of Coaching
- PHEC.393 A World History of Sport to 1900 (3)
- PHEC.395 Practicum in Sport Studies (3)
- PHEC.397 Practicum in Camping or Outdoor Educ. (3)
- PHEC.409 Stress Management, Tension Control & Human Performance (3)
- PHEC.415 Advanced Care & Prevention of Athletic Injuries (3)
- PHEC.419 Swimming and Pool Management (3)
- PHEC.441 The American Woman in Sport (3)

Psychology of Sport and Physical Activity Concentration

In addition to the core and activity requirements stated above, the student electing this option must complete the requirements below. Student must register as a Psychology minor.

Required Courses (26 credits)

- PSYC.101 General Psychology (not included in 26 credits) (3)
- PSYC.111 Behavioral Statistics (4)
- PSYC.261 Experimental Psychology (4)
- PSYC.305 Psychology of Learning (3)

Select from the following to complete 26 credits

- PSYC.203 Human Development (3)
- PSYC.211 Child Psychology (3)
- PSYC.311 Behavioral Modification I (3)
- PSYC.315 Motivation (3)
- PSYC.317 Sensation and Perception (3)
- PSYC.325 Social Psychology (3)
- PSYC.350 Personality (3)
- PSYC.404 Adolescent Psychology (3)
- PSYC.425 Introduction to the Helping Relationship (3)
- PSYC.431 Group Dynamics (3)
- PSYC.451 Introduction to the Exceptional Child, (3)
- PSYC.465 Physiological Psychology (3)

Electives

15 credits from the following

- PHEC.135 Overview of Adventure Education (3)
- PHEC.235 Individualized Fitness (3)
- PHEC.301 Recreation (3)
- PHEC.311 Kinesiology (4)
- PHEC.313 Physiology of Exercise (3)
- PHEC.331 Principles of Coaching (3)
- PHEC.393 A World History of Sport to 1900 (3)
- PHEC.395 Practicum in Sport Studies (3)
- PHEC.409 Stress Management, Tension Control & Human Performance (3)
- PHEC.441 The American Woman in Sport (3)
- PHEC.453 Organization & Administration of Athletics (3)

Sports Communications Concentration

In addition to the sports studies core and activity requirements stated above, the student electing this option must complete the requirements below, and complete a minor in Mass Communications.

Required Courses (27 credits)

- MCOM.151 Introduction to Journalism (3)
- MCOM.201 Introduction to Broadcasting (3)
- MCOM.202 Introduction to Film (3)
- MCOM.211 Communication Process (3)
- MCOM.315 Business and Professional Communications, (3)
- MCOM.353 Publicity and Public Relations (3)

Select six credits from the following

- MCOM.271 Television Production I (3)
- or
- 265 Radio Production I (3)
- MCOM.355 Newswriting (3)
- MCOM.358 News Editing and Copyreading (3)
- MCOM.373 TV Writing (3)
- MCOM.383 News Reporting (3)

Select three credits from the following

- MCOM.356 Feature Writing (3)
- MCOM.365 Radio Production II (3)
- or
- 371 Television Production II (3)
- MCOM.375 Broadcast Performance (3)
- MCOM.493-497 Independent Study-TV, Radio, Public Relations, Journalism (3)

Electives

15 credits selected from the following

- PHEC.135 Overview of Adventure Education (3)
- PHEC.235 Individualized Fitness (3)
- PHEC.301 Recreation (3)
- PHEC.302 Curriculum in PHEC (3)
- PHEC.305 Outdoor Education: Philosophy & Methods (3)
- PHEC.311 Kinesiology (4)
- PHEC.313 Physiology of Exercise (3)
- PHEC.331 Principles of Coaching (3)
- PHEC.393 A World History of Sport to 1900 (3)

- PHEC.395 Practicum in Sport Studies (3)
- PHEC.409 Stress Management, Tension Control & Human Performance (3)
- PHEC.441 The American Woman in Sport (3)
- PHEC.453 Organization & Administration of Athletics (3)

PROFESSIONAL PREPARATION ELEMENTARY EDUCATION

The Department of Physical Education offers three courses for students majoring in Early Childhood or Elementary Education. They are PHEC.281-282, "Physical Education for Elementary Education Students I, II" and PHEC.324, "Teaching Physical Education in the Elementary School." Course descriptions are listed in the back of this *Catalog*.

MEETING GENERAL UNIVERSITY REQUIREMENTS

Physical education courses provide the student with an opportunity to acquire the skills and understanding of selected physical activities. Emphasis is placed on developing sufficient competence to enjoy sports and recreational activities. To meet Group IA of the General University Requirements, a minimum of one credit hour of physical education activity must be taken from PHEC.001-PHEC.269 (excluding PHEC.245, PHEC.247, PHEC.248). All courses admit men and women, but several are more specifically designated in the *University Schedule Bulletin*. Students with medically screened physical limitations may elect Adapted Physical Education

(PHEC.010). Activity courses may be taken each semester of the student's academic career. Non-majors may apply for credit by examination for prior experience or skill in selected activities by contacting the chair of the department. Course outlines for all activity courses are available in the Physical Education office.

A partial list of course offerings follows:

- | | |
|----------------------------------|--|
| PHEC.010 Adaptive Modified (1.0) | PHEC.061 Swimming II (0.5) |
| PHEC.011 Archery I (0.5) | PHEC.062 Swim III (0.5) |
| PHEC.013 Badminton I (0.5) | PHEC.064 Basic Canoeing (0.5) |
| PHEC.015 Bicycle Touring (0.5) | PHEC.068 Water Polo (0.5) |
| PHEC.016 Pocket Billiards (0.5) | PHEC.072 Social Dance I (0.5) |
| PHEC.018 Body Mechanics (0.5) | PHEC.079 Tennis I (0.5) |
| PHEC.019 Bowling (0.5) | PHEC.203 Basketball I (0.5) |
| PHEC.021 Conditioning (0.5) | PHEC.207 Field Hockey I (0.5) |
| PHEC.023 Elem. Backpacking (1.0) | PHEC.209 Football I (0.5) |
| PHEC.025 Fencing I (0.5) | PHEC.228 Volleyball I (0.5) |
| PHEC.027 Golf I (0.5) | PHEC.235 Individualized Fitness (3.0) |
| PHEC.029 Gymnastics I (0.5) | PHEC.255 Adv. Individualized Fitness (3.0) |
| PHEC.038 Racquetball (0.5) | PHEC.261 Advanced Life Saving (1.0) |
| PHEC.043 Self Defense I (0.5) | PHEC.262 Water Safety Instructor (3.0) |
| PHEC.045 Squash Racquets (0.5) | |
| PHEC.055 Rhythmic Aerobics (2.0) | |
| PHEC.060 Swimming I (1.0) | |

ATHLETIC COACHING EMPHASIS AREA

Designed for the non-major student, this emphasis area develops coaching skills and attributes that will foster leadership qualities necessary for coaching in community recreation programs, intramural and extramural activities, and varsity sports.

Students interested in this option should contact the department for further information.

Required Core (12 credits)

- PHEC.235 Individualized Fitness (3)
- PHEC.315 Care and Prevention of Athletic Injuries (3)
- PHEC.331 Principles of Coaching (3)

PHEC.395 Practicum in Sport Studies (3)

Electives (6 credits)

PHEC.353 Sport and Society (3)

PHEC.355 Psychology of Sport (3)

PHEC.303 Organization and Administration of Physical Education (3)

or

453 Organization and Administration of Athletics (3)

PHEC.341 Concepts of Motor Learning (3)

PHEC.415 Advanced Care and Prevention of Athletic Injuries (3)

PHEC.419 Swimming and Pool Management (3)

TRANSFER CREDIT POLICY

Physical education transfer credits will be evaluated by the department on an individual basis. A minimum of one-half of the

credit hours required in the major (PHEC) must be completed at Towson State University.

GRADUATE PROGRAM

The Department of Physical Education, in cooperation with the Department of Secondary Education, offers a graduate program leading to a Master of Education degree in Secondary Education with a concentration in physical education. The program is designed to enrich the education of teachers and provide for advanced development of personal competencies congruent with their educational responsibilities. For further information consult the *Graduate School Catalog*.









The College of Education

The College of Education prepares students to enter the field of education in a variety of career settings. Professional careers for educators are available in school, government, business, media production, military, correctional institutions, counseling, and many other emerging fields.

Towson has a distinguished history in the preparation of classroom teachers. The recent movement of instruction and training specialists into other "non-school" settings, including industry, has opened new career options for graduates in the field of education. Many employers want their employees to possess the skills and understandings previously associated only with classroom teachers: writing goals and objectives, preparing an instructional system, establishing criteria for evaluating programs, revising, organizing and managing print and nonprint materials, and preparing instructional media.

The faculty of the College of Education are committed to research and methods of instruction which prepare individuals for exciting careers in all fields where these skills are needed. Majors within the college will equip students with certification to become classroom teachers or the professional skills needed to qualify for a variety of education-related careers.

*James B. Binko, Dean
Frances T. Bond,
Associate Dean*

COLLEGE OFFICE

Hawkins Hall
Room 301
(301) 321-2570

TEACHER EDUCATION PROGRAMS

The College of Education offers programs of study leading to the baccalaureate degree in education with certification to teach early childhood, elementary and secondary education. In addition, the college offers teacher certification for students enrolled in other colleges of the university.

The College of Education is nationally accredited by the National Council for Accreditation of Colleges of Teacher Education (NCATE). The teacher education programs are also approved by the Maryland State Department of Education, which uses the program approval standards set by the National Association of State Directors of Teacher Education and Certification (NASDTEC) and qualifies graduates for certification in all member states. Beginning April, 1986 applicants for Maryland teaching certificates will be required to take the appropriate tests of the National Teachers Examination. Applicants will be required to achieve the appropriate qualifying scores designated by the Maryland State Department of Education.

The aim of the College of Education is to assist students to become competent educators. To this end, the faculty are committed to the following goals:

1. To demonstrate a commitment to scholarly growth and research.
2. To require that all teaching majors receive a liberal education.
3. To promote good interpersonal relationships among persons in the teacher education community.
4. To promote in teacher education majors positive attitudes and professional commitment.
5. To promote active involvement in campus, community, and professional affiliations.
6. To develop in students the ability to interpret, analyze, evaluate, and communicate the content of their teaching specialty.
7. To develop in students teaching methods expected of practicing educational professionals.
8. To develop in students the values and skills that insure utilization of current instructional media and emerging technologies.
9. To develop competencies in students which enable them to teach students of diverse ethnic and cultural backgrounds.
10. To develop an understanding of lifelong human development that permits interpretation of learning behavior from childhood through adulthood.
11. To support a field experience program that provides early and continuous opportunities to relate theory and practice.
12. To produce an evaluation and reward system that encourages superior performance by faculty and students.
13. To provide equal opportunity for students to pursue their interests and talents without regard for race, cultural background, sex, or handicaps.
14. To provide skills in students to work effectively with exceptional learners, from gifted to those with disabilities.
15. To work cooperatively with school systems and other agencies to develop teacher preparation programs that meet current educational needs.

OFFICE

Hawkins Hall, Room 301, (301-321-3983)
Dr. Marilyn Nicholas

SCREENING AND ADVISING CENTER

Early Childhood, Elementary and Secondary Education students are requested to visit the Screening and Advising Center (Hawkins Hall 302) during their first semester at Towson. Students will be

assigned an advisor and will be given information regarding the basic skills tests and testing dates.

Admission to Teacher Education

The College of Education admits students either as freshmen or as undergraduate transfer students from accredited post-secondary institutions. Students who plan to enter one of the teacher education programs should complete an information form in their first semester at Towson. At the screening and advising center, students will be assigned an advisor according to their chosen major. During the freshman and sophomore years students are generally engaged in preprofessional courses or courses to complete General University Requirements.

Admission to Professional Education Programs

After completing a minimum of 45 credits, students in Early Childhood, Elementary or Secondary Education are required to apply for formal admission to the professional education programs. Application forms are available in the Center for Applied Skills in Education (HH 302). Majors in K-12 programs, such as Art, Music, Physical Education, and Dance, may obtain applications and advisors through their major departments. Full admittance to the professional program is conditional on meeting the following requirements:

1. a cumulative grade point average of at least 2.50 (including transfer credit)
2. a minimum average of at least 2.50 in the academic major
3. completion of the basic skills tests
4. completion of a speech and hearing test
5. completion of English 102 or 190 (104) with a grade of "C" or better

Admission to Student Teaching

Students apply for student teaching on a form provided by the director of the Center for Applied Skills in Education. Applications must be filed by the midsemester date, the semester prior to student teaching.

Students must have completed the following requirements prior to student teaching:

1. a minimum of 75 credits
2. a cumulative grade point average of at least 2.50
3. a minimum average of 2.75 in their academic major
4. a minimum average of 2.75 in the education courses
5. successful completion of the basic skills tests at the competency level determined by the Teacher Education Executive Board
6. completion of an advanced writing course with a grade of "C" or better

All teacher education students must successfully complete the basic skills tests and a speech and hearing test prior to student teaching.

Students should arrange to take the basic skills tests during their first semester at Towson. In some cases, supplementary course work or remedial activities may be required prior to student teaching.

Each teacher education student who has reached the appropriate level of competency is placed in a cooperating school system. Opportunities are available in rural or urban schools, public and private schools, "self-contained" or "open-space" classrooms with individual teachers or with teams. Students may be placed in schools where methods courses are taught by a college supervisor or individual placements are made for students who have taken methods courses on campus. Every attempt is made to secure the available placement that best meets the needs of the individual.

Differentiated student teaching (an additional and/or special student teaching experience) may be taken by students with the permission of their advisor.

Students enrolled in student teaching experience are charged a fee ranging from \$125 to \$250 per student teaching experience. This fee is used for remuneration to cooperating teachers in schools where student teaching is completed.

LIDA LEE TALL LEARNING RESOURCES CENTER

An elementary school, Nursery to grade 5, the Lida Lee Tall Learning Resources Center is an independent State agency reporting to the Education Coordinating Committee on an annual basis. The center is designed to serve all of Maryland's higher education and local education agencies and is utilized by students and faculty in the College of Education.

DEMONSTRATION CHILD CARE CENTER

The Council Day Care Demonstration and Training Center (Demonstration Child Care Center) is an educational support service program within the College of Education. This model developmental child care center is located in the Lida Lee Tall Learning Resource Center and is utilized by students and faculty of the University and external agencies. The Center operates twelve months a year and provides child care for children three through five years of age.

CENTER FOR APPLIED SKILLS IN EDUCATION (CASE)

OFFICE

Hawkins Hall, Room 302, (301) 321-2567

Director: MARILYN NICHOLAS

The Center for Applied Skills in Education (CASE) is a service housed and supported by the College of Education at Towson State University. The major purpose of the center is to assist students and method instructors in placing students in a variety of field settings such as tutoring, practicum and student teaching.

Specific operations of CASE include:

- overseeing all campus-initiated field programs
- administering field placements
- promoting field placements
- identifying schools and agencies to participate as settings for field placements
- screening applicants for field placements
- counseling students regarding field work
- maintaining liaison between off-campus schools/agencies and university departments
- providing in-service for schools and university personnel
- distributing protocols and other teaching materials related to field experiences.

Department of Early Childhood Education

Professors: BOND, KIMSEY (Graduate Coordinator)

Associate Professors: FRIEMAN, COULBY

Assistant Professors: CARPENTER, COHN, KARFGIN, LEONARD, POUR, WATERS (Chair)

OFFICE

Hawkins Hall, Room 301, (301) 321-2564

PROGRAMS OF THE DEPARTMENT

The Department of Early Childhood Education offers the following programs of study: the *major in Early Childhood Education*, the *combined major in Early Childhood Education and Elementary Education*, and the *Master of Education in Early Childhood Education*. For more information about the graduate program consult the *Graduate School Catalog*.

The Early Childhood Education major is designed for students who have an interest in working with young children from birth through age eight. It is built on the premise that special capabilities and understandings are necessary to teach successfully in the preschool and primary grades.

The major in Early Childhood Education leads to State certification to teach nursery school, kindergarten, and primary grades 1-3. It also prepares students for positions in other programs for young children such as day care centers, parent and child centers, child life programs, infant stimulation programs, private and other nonpublic preschool and primary settings.

Early Childhood/Elementary Education Certification

In cooperation with the Elementary Education Department, students can select courses that will enable them to become certified in both Early Childhood Education and Elementary Education. Graduates of this program would be eligible to teach children from birth through age thirteen. Students interested should contact the chairs of both departments to plan their programs.

Alternate Early Childhood Education Major

As a service to teachers who wish to pursue a degree in Early Childhood Education while they are on their teaching assignments and to other workers in programs for young children, the College of Continuing Studies offers an alternate program during evenings and summers for the preparation of nursery school, kindergarten, day care center, and primary teachers which will enable them to major in Early Childhood Education.

MAJOR IN EARLY CHILDHOOD EDUCATION

To meet both the college and Maryland State certification requirements in general education, the student must complete a minimum of 80 hours in the arts and sciences. The required professional education courses in Early Childhood Education total 40 hours. The remaining hours in either the academic areas or professional area are elected by the student to obtain the total of 128 hours needed for graduation. Students must have a "C" or better in all courses in their major, this includes the interdisciplinary methods courses in Music, Art, Physical Education and Science, taken concurrently with ECED 341, and the Math and Advanced Writing courses taken concurrently with ECED.342.

Early Childhood Education majors should confer with an Early Childhood advisor during the semester they declare their major in order to be sure they have planned a program that meets university, department and Maryland State Department of Education requirements. This is particularly important if students are planning a combined major, a double major or if they are planning a program of study in special education. Students should follow the special education requirements listed under *Special Education*. Students should consult with their advisors before taking courses on a pass/fail option since courses in their major and courses required for Maryland State Department of Education certification should not be taken on this option.

In addition, each student is required to complete a speech and hearing test as well as a basic skills test before entering ECED 341. Successful completion of the tests at the competency level determined by the Teacher Education Executive Board must be achieved by mid-semester of the semester prior to student teaching. In some

instances, supplementary course work or remedial activities may be required of students who fail to demonstrate adequate reading, writing or expressive communication skills.

A cumulative GPA of 2.50 is required for entrance into the professional program. A cumulative GPA of 2.50 and a minimum average of 2.75 in major courses are required for admission into student teaching.

Deviations from the program established by the Early Childhood Education Department are permitted only with the consent of the department chair.

Requirements for the Major

Students must complete 80 credits from the following university and departmental required courses. Courses starred should be completed prior to student teaching.

Required University and Department Courses

- I. Required Skills
 - A. Physical Education
 - *PHEC.281 P.E./ELED Students (1)
 - *PHEC.324 Tchg. P.E. in Elem. Sch. (2)
(Concurrent with ECED 341)
 - B. English
 - *ENGL.102 College Writing (3)
(Grade of "C" or better)
 - C. Advanced Writing Skills
 - *ECED.422 Writing Techniques for Teachers (3)
(Concurrent with ECED 342)
- II. Fine and Performing Arts
 - A. Art
 - *ART.105 Art in the Culture (3)
 - *ARED.373 Art for ECED (2)
(Concurrent with ECED 341)
 - B. Music
 - *MUSC.101 Intro Music Lit (3)
 - *MUED.307 Tech. Musc. Elem. Sch. (2)
(Concurrent with ECED 341)
- III. Humanities
 - A. English
 - *ENGL.XXX (3)
 - ENGL.XXX (3)
 - B. History
 - *HIST.XXX (3)
 - HIST.XXX (3)
 - C. Speech
 - *SPCH.131 Fund of Speech Comm. (3)
 - D. Other. Select ONE (3)
 - PHIL.XXX _____
 - MOLA.XXX _____
- IV. Natural and Mathematical Sciences
 - A. Biology
 - *BIOL.110 Gen. Biology (4)
 - B. Physical Science
 - *PHSC.101 Phy. Science (4)
 - C. Other Science
 - *SCIE.371 Tch. Science in ECE (2)
(Concurrent with ECED 341)
 - D. Mathematics
 - *MATH.204 Concepts of Math I (3)
 - *MATH.205 Concepts of Math II (3)
 - *MATH.321 Tch. Math in ECE (3)
(Concurrent with ECED 342)

E. Other. Select ONE (3)

BIOL.XXX
CHEM.XXX
COSC.XXX
MATH.XXX
PHSC.XXX
PHYS.XXX

V. Social and Behavioral Sciences

- A. Geography
 - GEOG.101, 102, or 109 (3)
- B. Psychology
 - *PSYC.101 Gen. Psych. (3)
 - *PSYC.201 Educ. Psych. (3)
- C. Health Science
 - *HLTH.101 Current Health Problems (3)
- D. Other Select TWO (6)
 - ANTH.XXX
 - ECON.XXX
 - POSC.XXX
 - SOCI.XXX

Non-Western Culture Course

This requirement can be met by a course in Group III or V. (List of approved courses available from ECE department).

Required Professional Courses

Students must complete 40 credits from the following education courses.

- ECED.101 Young Child As A Learner (taken before ECED.341) (3)
 ECED.341 Pre-Primary Curriculum (4)
 ECED.360 Readiness for Reading (concurrent with ECED.341) (2-3)
 ECED.342 Primary Curriculum (4)
 ECED.361 Teaching Reading in Early Childhood Education
 (concurrent with ECED.342) (3)
 ECED.343 Issues in Early Childhood Education
 (concurrent with ECED.351-352) (2)
 ECED.351-352 Student Teaching
 352 Preschool (5)
 Primary Grades (5)
 EDUC.401 Foundations of Education (3)
 ECED.xxx 2 Early Childhood Electives (6)
 EDUC.301 Introduction to Special Education: K-12 (3)

Professional Electives

- ECED.301 Mat. & Exp. for the Young Child (3)
 ECED.355 Differentiated Student Tchg. in ECE (1-8)
 ECED.411 Parents and Teachers: Partners in ECE (3)
 ECED.415 The Day Care Center (3)
 ECED.417 Early Identification of Learning Disabilities (3)
 ECED.421 Problems in Early Childhood Education (3)
 ECED.494 Travel and Study: Early Childhood Education (1-6)
 ECED.495 Independent Study in Education: Early Childhood
 Education (1-4)
 ECED.496 Directed Reading: Early Childhood Education (1-4)
 EDUC.417 Children's Literature (3)
 EDUC.419 Storytelling (3)
 EDUC.411 The Hospitalized Child (3)
 SPED.441 Special Needs of the Handicapped Child (3)
 SPED.497 Practicum: Mildly-Moderately Handicapped Children (1-4)

OTHER ELECTIVES

Eight hours in electives are required to bring the total number of credits to 128 for graduation. Professional or Arts and Sciences courses may be selected.

STUDENT TEACHING SEMESTER

A maximum of 15 credits may be taken during the student teaching semester.

TRANSFER CREDIT POLICY

Transfer students may transfer a maximum of 15 hours toward the Early Childhood Education major. The Introduction to Special Education course must be taken at Towson State.

Department of Elementary Education

Professors: BARBOUR (Chair) HANSON, HAUSERMAN, HOLMES, WILLIAMS

Associate Professors: NICHOLAS, SUHORSKY (Graduate Coordinator), VLANGAS

Assistant Professors: BOYD, MARTIN

OFFICE

Hawkins Hall, Room 403C, (301) 321-2565

PROGRAMS OF THE DEPARTMENT

The Department of Elementary Education offers the following programs of study: the *major in Elementary Education*, the *combined major in Elementary Education and Early Childhood Education*, the *Elementary Education major with a minor* in selected disciplines, the *Master of Education in Elementary Education*, and the *Master of Education in Reading*. For more information about the master's programs, consult the *Graduate School Catalog*.

The major in Elementary Education leads to certification to teach grades 1 through 6, through grade 8 in the middle schools organization, and grade 9 provided content requirements for secondary certification are met. The program provides classroom and laboratory experiences that prepare students for beginning teaching in elementary or middle schools.

Combined Major in Elementary/Early Childhood Education

In addition to the major in Elementary Education, it is possible through judicious course selection to carry a double major or to pursue a combined major.

In cooperation with the Early Childhood Education Department, students can select courses that will enable them to become certified in both Elementary and Early Childhood Education. Graduates of this program would be eligible to teach children from birth through age thirteen. Interested students should contact the chairs of both departments to plan their programs.

Elementary Education Major with a Minor

Elementary majors may arrange programs with minors in other selected disciplines by arrangement with the chair of Elementary Education and the chair of the other department concerned.

Elementary Education Major/Mathematics Minor

Through a cooperative program of the Elementary Education and Mathematics departments, students can use a middle school student teaching experience as a route to elementary certification with a mathematics minor. Interested students should consult with the chairs of the Elementary Education and Mathematics departments as early in their college program as possible.

Program with St. Mary's College

Students at St. Mary's College may obtain credit count certification in Elementary Education by taking their junior year at Towson

under the direction of the Coordinator of the Cooperative Education Program and the chair of Elementary Education at the university and the Director of Teacher Education at St. Mary's College.

MAJOR IN ELEMENTARY EDUCATION

To meet both the College and Maryland State certification requirements, students must complete 80 hours in the arts and sciences, at least 34 hours in professional education courses of which a minimum of 21 must be taken at Towson State, and electives to make a total of at least 126 credits. Students must maintain an overall grade point average of 2.50 or higher, and a 2.75 in courses for the major.

Students should consult with their advisors before taking courses on a pass/fail option. Courses in the major and courses required for Maryland State Department of Education certification must not be taken on this option.

Theory and practice are combined to provide a thorough preparation for teaching, and such preparation must be demonstrated prior to student teaching. Students are required to consult with their Elementary Education advisors concerning the basic skills tests to be taken. In many cases, supplementary course work may be required of students who fail to demonstrate adequate reading and writing proficiencies. Successful completion of the basic skills tests must be met by mid-semester of the semester prior to student teaching.

Students graduating after 1985 must complete a special education requirement. Students should consult with their advisors for course suggestions.

Deviations from the program pattern for Elementary majors, in content or sequence of professional education courses, are permitted only with the written consent of the chair of the Elementary Education Department.

Requirements for the Major

Students must complete 83 credits from the following university and departmental required courses, and required skills courses.

The student must take prerequisite courses in art, music, and/or physical education for the two special area methods chosen. The third methods course may be taken as an elective after Student Teaching. Music education courses (MUED) cannot be used to fulfill General University Requirements.

Courses starred (*) should be completed before Student Teaching.

Required University and Departmental Courses

Academic Content

I. REQUIRED SKILLS

- A. Physical Education
 - *PHEC.281 P.E./ELED Students I (1)
 - *PHEC.282 P.E./ELED Students II (1)
 - PHEC.324 Teaching P.E. in Elementary School (2)
- B. English
 - *ENGL.102 College Writing (3)
(Grade of "C" or better)
- C. Advanced Writing Skills
 - *EDUC.301 Writing & Comm. Skills for Teachers (3)

II. Fine Arts

- A. Art
 - *ART.xxx Elective (3)
 - ARED.371 Art and the Child (3)
- B. Music
 - *MUSC.107 Music Fundamentals (3)
 - MUED.305 Teaching Music in Elementary School (2)

III. Humanities

- A. English
 - *ENGL.xxx Elective (3)

- *ENGL.xxx Elective (3)
- ENGL.xxx Elective (3)
- B. History
 - *HIST.xxx Elective (3)
 - *HIST.xxx Elective (3)
 - HIST.xxx Elective (3)
- C. Other. *Select two courses from the following fields of study.*
 - PHIL.xxx Philosophy Elective (3)
 - SPCH.xxx Speech Elective (3)
 - or
 - SPPA.xxx Speech Pathology/Audiology Elective (3)
 - AMST/WMST Interdisciplinary Studies: American/Women's Studies (3)
 - MOLA.xxx Modern Language Elective (3)
- IV. Natural & Mathematical Sciences
 - A. Biology
 - *BIOL.110 Cont. General Biology (4)
 - BIOL.303 Life Sciences For The Elementary Teacher (3)
 - B. Physical Science
 - *PHSC.101 Physical Science I (4)
 - PHSC.303 Earth Space Science in Childhood Education (3)
 - C. Mathematics
 - *MATH.204 Concepts of Mathematics for Elementary Teachers I (3)
 - *MATH.205 Concepts of Mathematics for Elementary Teachers II (3)
 - MATH.323 Teaching Math in Elementary School (3)
- V. Social & Behavioral Sciences
 - A. Geography
 - *GEOG.101 Physical Geography (3)
 - or
 - GEOG.102 World Regional Geography (3)
 - or
 - GEOG.109 Introduction to Human Geography (3)
 - B. Psychology
 - *PSYC.101 General Psychology (3)
 - *PSYC.201 Educational Psychology (3)
 - C. Other. *Select any two courses from the following fields of study:*
 - Anthropology
 - ANTH.xxx Elective (3)
 - Economics
 - ECON.xxx Elective (3)
 - Political Science
 - POSC.xxx Elective (3)
 - Sociology
 - SOCI.xxx Elective (3)
 - D. Health Science
 - *HLTH.101 Current Health Problems (3)
 - Professional Education
 - *ELED.363 Field Studies in Elementary Teaching (3)
 - SPED.301 Introduction to Special Education (3)
 - EDUC.417 Children's Literature (3)
 - *ELED.311 Child & Elementary School Curriculum (3)
 - *ELED.323 Teaching Reading in Elementary School (3)
 - ELED.379 Student Teaching (10)
 - ELED.462 Elementary Curriculum II (6)
 - EDUC.401 Foundations of Education (3)
 - EDUC.414 Education Tests & Measurements (3)

Electives (6 credits)

Electives in sufficient number to total at least 126 semester hours are needed. Professional Education or Arts & Sciences courses are recommended. One course should be a multicultural course.

Special Education

Through a cooperative arrangement with Coppin State College, Early Childhood and Elementary majors can complete a program

in Special Education. The program is generic and age specific and requires 39 credits within six special education categories. Some of these credits are in the existing Early Childhood and Elementary programs.

Nine hours are taught by Coppin State faculty. Interested students should consult Dr. Marilyn Lewis-Hoffman (Early Childhood Education) or Dr. Chandler Barbour (Elementary Education).

All undergraduate teacher education students are required to take SPED.301, Introduction to Special Education, in order to complete their program requirements.

Department of General Education

Professors: GUTKOSKA (Coordinator of graduate Reading Program), LEWIS (Coordinator of Special Education), LINDNER, VAN NORMAN (Chair of General Education and Coordinator of General Studies in Education Major), WALL (Research Coordinator)

Associate Professors: GEHRING, HELFRICH, JONES, ROSECRANS (Graduate Coordinator of Instructional Technology graduate programs)

Assistant Professors: BLAIR (Coordinator of Developmental Reading), BURTON (Coordinator of School Library Media and Library and Information Services programs), CHEEKS, DIETZ, GARTLAND

OFFICE

Hawkins Hall, Room 301 B, (301) 321-2568

PROGRAMS OF THE DEPARTMENT

The General Education Department is responsible for courses that are not limited to a single teacher education program. The Education course listings include "core" and foundational education courses providing knowledge and skills of general application in teaching and training areas. The Instructional Technology and Special Education offerings are also not age or grade-specific.

The Department coordinates the Reading Programs and the Reading Center; the Learning Center; Developmental Reading courses; Special Education; Instructional Technology; and the General Studies in Education Major.

MAJOR IN GENERAL STUDIES IN EDUCATION

(Coordinator: Royce Van Norman, HH 107)

The major in General Studies in Education is a highly individualized program designed to meet the needs of students with special career plans. Their preparation allows them to assume entry level positions in education-related careers other than classroom teaching. It is similar to the general arts and sciences major because a concentration of electives within an area of specialty is allowed along with a balanced selection of liberal arts courses.

Requirements for the Major

The student must achieve a 2.00 GPA and should declare the major by submitting a plan of study no later than the first semester of the junior year. This plan must be approved in *advance* by the student's Education advisor and Coordinator of General Studies in Education.

The student must satisfy the General University Requirements for graduation.

The student must complete 36 additional semester hours in liberal arts and sciences courses selected from Anthropology, Art,

Biology, Chemistry, Computer Science, Dance, Economics, English, Geography, Health, History, Modern Languages, Mathematics, Music, Philosophy, Physics, Physical Science, Psychology, Sociology, or Theatre. These hours must include work from a minimum of four different departments and be approximately balanced between the arts and the sciences. A rationale for the selection of these courses must be followed. With the approval of the student's advisor and the appropriate dean, courses in departments not listed above may be allowed if these courses are needed to complement the student's program.

The student must also include in his or her program a professional component of approved professional courses planned to prepare him or her for a specialty. This component is to be designed with appropriate competencies in an area of expertise chosen by the student and consist of at least 80% upper-division courses which center around a "core" which leads to professional certification or expertise in an education-related occupation.

SCHOOL MEDIA, LIBRARY INFORMATION SERVICES, AND INSTRUCTIONAL TECHNOLOGY

Instructional Technology

(Coordinator: Linda Burton, Media Center 201)

Elective courses in Instructional Technology allow students of any major to develop media design, production, and utilization competencies for business, government, non-profit, and educational settings. In addition, the following two programs are available as concentrations under the General Education Major.

Library and Information Services

This concentration in the General Education Major is designed for students desiring a career in library and information services in public libraries or special collections.

Library and Information Services Concentration

In completing the General University Requirements, the following should be included:

- | | | |
|----------|--|-----|
| PSYC 101 | General Psychology (for Group V) | (3) |
| ISTC 305 | Writing Skills for Media Centers (for Group I) | (3) |

These additional courses are required in the concentration:

- | | | |
|------------------------------|--|-----|
| ISTC 101 | Utilization of Library Resources | (3) |
| PSYC 201 | Educational Psychology | (3) |
| PSYC 203 | Human Growth and Development | (3) |
| ISTC 301 | Utilization of Instructional Media | (3) |
| ISTC 302 | Design and Production of Instructional Materials | (3) |
| ISTC 311 | Media Center Administration | (3) |
| ISTC 313 | Evaluation and Selection of Media | (3) |
| ISTC 441 | Computer Technology and Utilization | (3) |
| ISTC 471 | Reference and Information Services | (3) |
| ISTC 473 | Cataloging and Classification of Media | (3) |
| EDUC 417 | Children's Literature | |
| | <i>or</i> | |
| EDUC 418 | Young Adult Literature | (3) |
| One additional ISTC elective | | |
| (or ENGL 232, 242, or 270) | | |
| ISTC 497 | Practicum in Instructional Technology | (6) |

The major is completed by 24 additional electives chosen from the Arts and Sciences which may include the Social Sciences and Health.

School Library Media

Students in this concentration under the General Education Major may qualify for Maryland State Certification for school "librarian" or media center positions (Education Media Associate, Level I).

For any of the above, a student should contact the coordinator and formally develop a plan of study.

School Library Media Concentration

In completing the General University Requirements, the following should be included:

- | | | |
|----------|--|-----|
| PSYC 101 | General Psychology (for Group V) | (3) |
| ISTC 305 | Writing Skills for Media Centers (For Group I) | (3) |
| | <i>or</i> | |
| EDUC 302 | Writing and Communication Skills for Teachers | (3) |

These additional courses are required in the concentration.

- | | | |
|----------|--|-----|
| PSYC 201 | Educational Psychology | (3) |
| PSYC 203 | Human Growth and Development | (3) |
| SCED 319 | Survey of Educational Programs | (3) |
| | <i>or</i> | |
| SCED 341 | Principles of Secondary Education | |
| ISTC 301 | Utilization of Instructional Media | (3) |
| ISTC 302 | Design and Production of Instructional Materials | (3) |
| ISTC 311 | Media Center Administration | (3) |
| ISTC 313 | Evaluation and Selection of Media | (3) |
| ISTC 471 | Reference and Information Sources | (3) |
| ISTC 473 | Cataloging and Classification of Media | (3) |
| ELEM 323 | Teaching Reading in the Elementary School | |
| | <i>or</i> | |
| SCED 460 | | (3) |
| EDUC 417 | Children's Literature | |
| | <i>or</i> | |
| EDUC 418 | Young Adult Literature | (3) |
| EDUC 301 | Introduction to Special Education | (3) |
| ISTC 475 | Methods for Media Personnel in the Elementary School | (2) |
| ISTC 477 | Methods for Media Personnel in the Secondary School | (2) |
| ISTC 397 | Practicum: The Media Center in the Elementary School | (6) |
| ISTC 398 | Practicum: The Media Center in the Secondary School | (6) |

The major is completed by 21 additional electives chosen from the Arts and Sciences which may include the Social Sciences and Health.

NOTE: To complete this M.S.D.E. approved certification program, the student must comply with the requirements of the Teacher Education Executive Board for Undergraduate Teacher Certification Programs.

Graduate Study in Instructional Technology

(Coordinator: Dr. Gary Rosecrans, Media Center 200)

The Department of General Education offers a comprehensive graduate program which prepares professionals for careers in the instructional media field. The Instructional Development concentration is intended for those who wish to prepare for training and media positions in business, community and governmental settings. The Library Media concentration is intended for the person who plans to direct a Media Center operation. Persons holding this degree are eligible for certification by the Maryland State Department of Education as an Educational Media Generalist (Level II). See the *Graduate School Catalog* for details.

READING INSTRUCTION

(Coordinator: Dr. Joseph Gutkoska, HH 107)

A graduate program specifically designed to improve the teaching of reading at all age levels is available for qualified students seeking initial Maryland State Certification as Reading Specialist K-12. See the *Graduate School Catalog* for details.

The Reading Center

This clinic provides diagnostic and remediation services for students of all ages. It provides practicum experiences for graduate students in the Master's degree program in Reading while providing assistance to individuals in the community with reading problems.

DEVELOPMENTAL READING

(Coordinator: A. Karen Blair, HH 107)

Remediation in reading skills is provided for Towson students through the Developmental Studies courses in reading scheduled by the General Education Department in collaboration with the Learning Center. (See Developmental Studies under Student Services Programs.)

The Learning Center

(Director: M. Steve Boone, HH 210)

Tutorial services and re-testing for the Developmental Reading Program as well as for the Teacher Education basic competency screening requirements are provided by this center

SPECIAL EDUCATION

(Coordinator: Dr. Marilyn Lewis-Hoffman, HH 103-A)

Towson State University does not offer a degree in special education. The courses offered in special education are designed to supplement the regular teacher education program to enable teachers to work with atypical or handicapped children who are mainstreamed. All education majors are required to take SPED 301 Introduction to Special Education.

Through a cooperative arrangement with Coppin State College, Towson State University offers a program in special education whereby students can become eligible for credit count certification in special education.

Students must major in either Early Childhood Education or Elementary Education at Towson State University and complete additional courses in special education to become certified. Certification in special education in Maryland is generic. Generic certification includes all handicapping conditions except Hearing Impaired, Visually Impaired, or Severely and Profoundly Handicapped. Students who wish to become certified in these categories require additional endorsement/courses. Towson State University does not offer training/courses in these areas.

Students who desire Maryland State Certification in Special Education should consult with our coordinator.

Department of Secondary Education

Professors: BINKO, BRODBELT, JESSUP, KILEY (*Graduate Coordinator*), WESLEY

Associate Professors: LAWLOR (*Chair*), NEUBERT

Assistant Professor: LYONS

OFFICE

Hawkins Hall, Room 405L, (301) 321-2685

PROGRAMS OF THE DEPARTMENT

The Department of Secondary Education offers 15 certification programs in the secondary subject areas of Biology, Business, Chem-

istry, English, French, General Science, Geography, German, Health, History, Mathematics, Natural Science, Physics, Social Science, and Spanish.

The department also offers Dual Certification programs that qualify teachers for kindergarten through grade 12 in the following subject areas: Art Education, Dance, Library Media, Music and Physical Education.

All teacher education programs are approved by the Maryland State Department of Education. Upon graduation in one of these programs, students are eligible for certification to teach in Maryland.

The programs of education for junior, middle and high school teachers are designed to bring about close integration between teaching methods and the practical experience of observation and student teaching. **Students are required to file a Declaration of Intention Form. A Secondary Education advisor is required in addition to an advisor in the major for the following majors: English Education, History Education, Mathematics Education, Modern Language Education, Science Education, or Social Science Education.** For information, come to Hawkins Hall 405L.

Concurrently with declaration of intention, students should arrange to take the required basic skills tests. Students should arrange to take these required tests (scheduled every semester) at the first opportunity so that remediation may be sought, if necessary, and proficiency be achieved before student teaching. In some cases, supplementary work may be required of students who fail to demonstrate adequate reading and writing competencies. Students will consult with education advisors to obtain results of the above tests and where necessary to plan for appropriate remediation. **Students must secure approval for student teaching from the Secondary Education Department; it is contingent upon successful completion of the required courses and demonstration of acceptable competencies in the tested areas.** (Student teaching applications must be signed by the education advisor.)

After introductory courses in the nature of today's schools and their students and appropriate field experiences, the prospective secondary teacher enters the student teaching semester. Methods, philosophy, techniques, and practice are combined to provide a thorough preparation for teaching, and such preparation must be demonstrated prior to student teaching. The student teaching semester is followed by a course in the sociological, philosophical, psychological, and historical foundations of education.

To meet new areas of demand, areas of study are being developed in adult education, middle school education, safety education, special education, training, and writing and communications skills.

SECONDARY TEACHER EDUCATION

To obtain teaching certification at the secondary level, students must major in one of the following academic fields: Biology, Business, Chemistry, English, French, Geography, German, Health, History, Mathematics, Natural Science, Physics, Social Science, or Spanish. In addition, students must satisfy the General University Requirements, take the National Teachers Exam and complete the Professional Education courses listed below.

Required Professional Education Courses

A minimum grade of "C" is required for all courses.

PSYC.201	Educational Psychology (3)
SCED.341	Principles of Secondary Education (4)
	or
SCED.319	Survey of Educational Programs (3) (depending upon your major program)
SCED.460	Teaching Reading in the Secondary School (3) (Taken concurrently with Principles of Secondary Education) and shares a required field experience)
SPED.301	Intro. to Special Education (3)

ISTC.269	Methods of Teaching Major Subject (3-6)
SCED.398	Laboratory in Instructional Hardware (1)
SCED.398	Student Teaching (12)
EDUC.401	Foundations of Education (3)

Additional requirements to be integrated into GURs:

HIST.145	History of U.S. to Mid-19th Century (3)
	or
HIST.146	History of U.S. Since Mid-19th Century (3)
SPCH.131	Fundamentals of Speech Communication (3)
	One Course in Non-Western Culture (3)

(See secondary education advisor for approved list of courses.)

Note: Some methods courses are offered spring or fall only. Check with your advisor.

Subject Matter

Refer to the department under which a specific major is discussed. For instance, those interested in teaching History at the secondary level should refer to the Secondary Education Program of the History Department for specific requirements in that discipline.

GPA Requirement for Student Teaching

Subject Matter

Effective September 1988, all students must meet the following GPA requirements to be admitted to student teaching: 2.75 in major field and in professional education courses 2.50 overall.

KINDERGARTEN-TWELFTH GRADE TEACHER EDUCATION PROGRAMS

Students may obtain certification to teach the following subjects at both the elementary and secondary levels: Art Education, Dance, Library Media, Music and Physical Education.

Students must satisfy the General University Requirements, the professional education courses listed below, and the requirements for each major listed below.

Required Professional Education Courses

PSYC.201	Educational Psychology (3)
SCED.319	Survey of Educational Programs (3)
SPED.301	Introduction to Special Education (3)
_____	Methods of Teaching Major Subject in Elementary School (3-6)
_____	Methods of Teaching Major Subject in Secondary School (3-6)

ELED.379	Student Teaching in Elementary School (6-8)
SCED.____	Student Teaching in Secondary School (6-7)
EDUC.401	Foundations of Education (3)

Additional requirements to be integrated into GURs:

HIST.145	History of US to Mid-19th Century (3)
	or
HIST.146	History of US Since Mid-19th Century (3)
SPCH.131	Fundamentals of Speech Communication (3)
_____	One course in Non-Western Culture (3)*

*(See secondary education advisor for approved list of courses)

Teacher education programs exist in the following areas:

Art Education
Dance Education
Library Media
Music Education
Physical Education

For required courses and special program information, consult the section of this *Catalog* dealing with each particular major.

Adult Education

The study of Adult Education is designed to prepare teachers of adults in settings outside the school. Particular emphasis is placed on the process of training in business, industry, government, and other institutions. The program has been planned cooperatively with Departments in the School of Business.

An introductory course in learning theories as applied to adults is followed by specialized courses in training techniques, planning instruction, evaluation techniques, design and creation of audio-visual materials, and safety education. Additional coursework in industrial psychology and related areas comprises the final component of the specialization.

Social Restoration Education

Institutionalized youth who are alienated, socially maladjusted, or delinquent, as well as those minors who become wards of the state for other reasons (orphans, or victims of child abuse, for example), need teachers who are especially motivated and who have a range of skills beyond those of minimal teacher preparation. The State of Maryland does not have specific certification requirements for this specialization, but Towson offers a concentration of electives at both undergraduate and graduate levels.







The College of Fine Arts and Communication

The College of Fine Arts and Communication offers degree programs in Art, Dance, Music, Speech and Mass Communication, and Theatre. The objective of these programs is to provide the necessary training and education for students to excel in their chosen professions. Additionally, the college offers all Towson State University students the opportunity to actively participate in both academic and artistic experiences in the arts and communication.

As its commitment to the community at large, the College of Fine Arts and Communication presents numerous concerts, exhibits, plays and film forums which are open to the public. The Asian Arts Center is maintained by the College of Fine Arts and Communication and houses all of the university's collections. The collections are exhibited for the public in the Roberts Gallery and numerous other locations in the university. Fittingly, they are used as teaching tools by faculty members from several disciplines.

Gilbert A. Brungardt, Dean

COLLEGE OFFICE

Fine Arts Center
Room 394B
(301) 321-3288

Department of Art

Professors: J. FIX, LADD, MITCHELL, PAULSEN

Associate Professors: BARTLETT, CUBBISON, D. FIX, FLOOD (*Chair*), OUNDJIAN, SUPENSKY

Assistant Professors: DENNER, GILCHRIEST, PITMAN, ROBB, WOOD

Instructors: LEE, PULLEN

Assistant Instructor: COBERLY (*Slide Librarian*)

Director, Asian Arts Center—Curator of the Collections: SUEWHEI T. HSIEH

OFFICE

Fine Arts Center, Room 358, (301) 321-2808

PROGRAMS OF THE DEPARTMENT

The Department of Art, designated as the Center for the Visual Arts in the State University and College System, offers a comprehensive program comprised of eight areas of concentration: *Art History, Ceramics, Fibers, Jewelry, Painting, Printmaking, Sculpture, and Visual Communication/Photography*. Associated with these concentrations, five degree programs are offered: the *major in Studio Art*, the *minor in Studio Art*, the *major in Art Education* for students planning to teach at the elementary or secondary levels, the *Master of Education in Art Education* and the *Master of Fine Arts*.

Because the creative process in the visual arts relies so heavily on the dialogue between instructor and students, course work is structured to provide optimum contact on both a group and individualized basis. It is in this atmosphere that the Art Department provides a background for personal creativity, prepares students for graduate study and creates a foundation for careers in art.

FACILITIES

The facilities available to the undergraduate and graduate student are extensive. They are designed to encourage and fully support the creative endeavors of students. Each area of concentration has all of the equipment necessary to assure that students reach their potential.

CAREER OPPORTUNITIES

The Art Department, as a part of Towson State University, has a long tradition of preparing students as highly qualified teachers. To prepare students for other careers in art, the department, in conjunction with the Office of Cooperative Education, has developed internships in the business community. These internships provide students with the experience necessary for achieving success in commercial fields. Internships in interior design, illustration and advertising are just a few of the experiences available.

MAJOR IN STUDIO ART

Art majors must complete 60 credit hours in art. The major program consists of 18 hours of foundation requirements in the freshman year, 15 hours of second-level foundation requirements, and 27 hours in an area of concentration.

Requirements for the Major

Foundation Requirements

First-Level Required Courses (18 credits)

Certain subjects are fundamental to training in all of the arts. In

the freshman year, the student begins to acquire the technical skills necessary for a career in the arts. The foundation requirements form a basis for the ability to communicate in visual and verbal terms; to write about art; to explore media and ideas; and to think and respond creatively.

ART.103	Two Dimensional Design (3)
ART.104	Three Dimensional Design (3)
ART.111	Drawing & the Appreciation of Drawing I (3)
ART.211	Drawing II (3)
ART.221	Prehistoric to Medieval Art (3)
ART.222	Renaissance to Contemporary Art (3)

Second-Level Required Courses (15 credits)

ART.229	Painting (3)
ART.xxx	Sculpture Course (3)
ART.xxx	Crafts Course (3)
ART.xxx	Two Upper-Division Art History Courses (6)

Each Art major must complete an area of concentration before graduation. The area of concentration is designed to offer advanced studies and intensify the content necessary to develop career goals.

Crafts Concentrations

Ceramics

Required Courses (18 credits)

ART.231	Ceramics I (3)
ART.309	Ceramics: The Potter's Wheel (3)
ART.310	Ceramic Sculpture (3)
ART.408	Advanced Ceramics (3)
ART.414	Advanced Studio (3)
ART.xxx	Any Upper Division Craft Course (3)

Electives (9 credits)

Suggested Art Electives

ART.405	Art Principles and Criticism (3)
ART.415	Advanced Studio (3)
ART.416	Advanced Studio (3)
ART.xxx	Any Advanced Sculpture Course (3)

Fibers

Required Courses (18 credits)

ART.201	Color (3)
ART.320	Fiber Construction (3)
ART.326	Fabric Design: Dyeing (3)
ART.327	Fabric Design: Printing (3)
ART.328	Weaving I (3)
ART.4xx	Upper-Division Weaving or Fabric Design (3)

Electives (9 credits)

Suggested Art Electives

ART.333	Papermaking (3)
ART.414	Advanced Studio (3)
ART.415	Advanced Studio (3)
ART.416	Advanced Studio (3)
ART.426	Fabric Design: Dyeing II (3)
ART.427	Fabric Design: Printing II (3)
ART.428	Weaving II (3)
ART.xxx	Any advanced painting, graphics, or advanced sculpture course (3)

Jewelry/Metal

Required Courses (18 credits)

ART.313	Enameling I (3)
ART.318	Jewelry I (3)
ART.319	Metalsmithing (3)
ART.339	Metal Sculpture I (3)
ART.414	Advanced Studio (3)
ART.418	Jewelry II (3)

Electives (9 credits)

Suggested Art Electives

ART.311	Wood I (3)
ART.405	Art Principles & Criticism (3)
ART.415	Advanced Studio (3)
ART.416	

Printmaking Concentration

Required Courses (18 credits)

ART.234	Photography I (3)
ART.347	Screen Process I (3)
ART.349	Relief Process I (3)
ART.350	Intaglio Process I (3)
ART.353	Lithographic Process I (3)
ART.xxx	Required second upper-division print course (3)

Electives (9 credits)

Select three upper-division art courses. Suggested: two painting courses.

Painting Concentration

Required Courses (18 credits)

ART.201	Color (3)
ART.230	Watercolor and Related Media I (3)
ART.329	Oil Painting and Related Media II (3)
ART.330	Watercolor and Related Media II (3)
ART.429	Advanced Painting: Oils (3)
ART.430	Advanced Painting: Watercolor (3)

Electives (9 credits)

Suggested Art Electives

ART.347	Printmaking (Screen Process) I (3)
ART.349	Relief Process I (3)
ART.350	Intaglio Process I (3)
ART.353	Lithographic Process I (3)
ART.402	Life Drawing & Anatomy I (3)
ART.447	Screen Process II (3)
ART.449	Relief Process II (3)
ART.453	Lithographic Process II (3)

Visual Communication/Photography Concentration

Required Courses (27 credits)

ART.220	Exhibition Techniques (3)
ART.225	Design for Visual Communications I (3)
ART.234	Photography I (3)
ART.325	Design for Visual Communications II (3)
ART.334	Photography II (3)
	or
ART.335	Color Photography I (3)
ART.347	Screen Process I (3)
	or
ART.353	Lithographic Process I (3)
ART.371	Production Techniques for the Graphic Designer (3)

ART.373	Illustration (3)
ART.473	Illustration II (3)

Sculpture Concentration

Required Courses (18 credits)

One of the following

ART.240	Modeling: Human Figure (3)
ART.241	Contemporary Sculpture (3)
ART.242	Carving Studio I (3)

Three of the following

ART.311	Wood I (3)
ART.339	Metal Sculpture I (3)
ART.340	Modeling Studio II (3)
ART.341	Sculpture: Contemporary Media and Concepts I (3)
ART.342	Carving Studio II (3)

Two of the following

ART.411	Wood II (3)
ART.439	Metal Sculpture II (3)
ART.440	Modeling Studio III (3)
ART.442	Carving Studio III (3)

Electives (6 credits)

Two of the following

ART.006	Survey of Hand and Power Tools (3)
ART.231	Ceramics I (3)
ART.234	Photography I (3)
ART.310	Ceramic Sculpture (3)
ART.402	Life Drawing and Anatomy I (3)
ART.414	Advanced Studio (To be taken only after advanced advisement) (3)
ART.415	Advanced Studio (3)
ART.416	Advanced Studio (3)
ART.424	Henry Moore to the Present (3)

Art History Concentration

Required Courses (6 credits)

ART.391	Research in Art History (3)
ART.485	Seminar in Art History (3)

Electives (21 credits)

Two of the following

ART.444	Byzantine to Gothic Art (3)
ART.445	Italian Renaissance Art: 15th-16th Centuries (3)
ART.471	Art and Architecture of Ancient Greece (3)
ART.472	Art and Architecture of the Roman Empire (3)
ART.479	Baroque Art and Architecture—17th Century (3)
ART.480	Eighteenth Century Art and Architecture (3)

One of the following

ART.423	Picasso to the Present (3)
ART.424	Henry Moore to the Present (3)
ART.425	Frank Lloyd Wright to the Present (3)

Four of the following

ART.018	Minimex American Art: 17th, 18th & 19th Centuries (3)
ART.209	Black Art History (3)
ART.302	The Art of China (3)
ART.303	The Art of Japan (3)
ART.305	Architectural Concepts (3)
ART.316	The Image of Women in Art (3)
ART.405	Art Principles and Criticism (3)
ART.423	Picasso to the Present (3)
ART.424	Henry Moore to the Present (3)
ART.425	Frank Lloyd Wright to the Present (3)
ART.444	Byzantine to Gothic Art (3)
ART.445	Italian Renaissance Art: 15th & 16th Centuries (3)
ART.471	Art and Architecture of Ancient Greece (3)
ART.472	Art and Architecture of the Roman Empire (3)

- ART.479 Baroque Art and Architecture—
17th Century (3)
ART.480 Eighteenth Century Art and Architecture (3)

Note: Concurrent foreign language study is strongly recommended, but is not required.

MAJOR IN ART EDUCATION

Students in the Art Education program receive certification to teach art at the elementary and secondary levels in Maryland upon graduation. In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education (see K-12 Teacher Education Programs), students must complete 51 credits in art courses. All requirements for the major in Art Education are listed below.

Students with undergraduate degrees from other accredited institutions and undergraduate transfer students wishing certification, may be required to take 21 of their studio/art history credits in this department.

Requirements for the Major

Foundation Requirements (36 credits)

The first 18 credits of foundation requirements are required for the Art Education major. The second-level foundation requirements are the same as those required for Studio Art majors, except that Ceramics I (ART.231) must be included in the program.

Area of Concentration Requirements

Required Courses (15 credits)

- ART.225 Design for Visual Communication I (3)
ART.230 Watercolor and Related Media I (3)
ART.234 Photography (3)
ARED.375 Materials and Techniques for Teachers of Art (3)

One of the following

- ART.347 Screen Process I (3)
ART.349 Relief Process I (3)
ART.350 Intaglio Process I (3)
ART.353 Lithographic Process I (3)

Teacher Education Courses (36 credits)

The following courses must be taken before the ARED courses listed below.

- PSYC.101 General Psychology (3)
PSYC.201 Educational Psychology (3)
SCED.319 Survey of Education Programs (3)
(Students entering with a degree substitute SCED.341, Principles of Secondary Education)

These courses are taken concurrently (fall semester only).

- ARED.475 Teaching Art in the Elementary School (3)
ARED.477 Field Experience in Art Education (3)
ARED.479 Teaching Art in the Secondary School (3)

This course precedes student teaching for most Art Education students.

- EDUC.401 Foundations of Education (3)

These are taken concurrently (spring semester only).

- ELED.380 Student Teaching in Elementary School (6)
SCED.380 Student Teaching in Secondary School (6)
ARED.455 Pro-Seminar in the Teaching of Art (3)

MINOR IN ART

Students who wish a Minor in Art should consult with their departmental advisor.

The following courses must be selected

- ART.103 Two Dimensional Design (3)
ART.104 Three Dimensional Design (3)

- ART.111 Drawing and the Appreciation of Drawing I (3)
ART.221 Prehistoric to Medieval Art (3)
ART.229 Oil Painting and Related Media I (3)
or
ART.230 Watercolor and Related Media I (3)
ART.240 Sculpture: Modeling Studio I—The Human Figure (3)
or
ART.241 Sculpture: Contemporary Media and Concepts I (3)
ART.xxx Art electives (6)

TRANSFER CREDIT POLICY

The Art Department accepts art credits from other accredited colleges and universities. Portfolio evaluation and transfer credit sheets form a basis for course evaluation.

ART HONORS PROGRAMS

The Art Department grants honors in Art Education, Art History, and Studio Art. Admission is granted at the end of the sophomore or beginning of the junior year to students who have the following qualifications: overall cumulative average of 3.25, major average of 3.25, recommendation of advisor to departmental honors coordinator. The minimum requirements for graduation with honors in Art are: overall cumulative average of 3.25 and 3.50 in major field and completion of the honors program of study.

STUDENT WORK POLICY

Material submitted by students to satisfy requirements in any course automatically becomes the property of the Art Department. This material may be returned to students at the discretion of the faculty member.

Department of Dance

Professor: BREAZEALE (Chair)

Assistant Professors: ANBINDER, PRICE, RINALDO

Part-Time Faculty: DeRUVO, MARTIN, STEWART, WANICH-ROMITA

OFFICE

Burdick Hall, Room 127, (301) 321-2760

PROGRAMS OF THE DEPARTMENT

The Department of Dance offers the following: *dance courses that fulfill General University Requirements, the Bachelor of Fine Arts degree in Dance Performance, the Bachelor of Fine Arts degree in Dance Performance and Education*, including teacher certification for students planning to teach dance, TED (Towson Ensemble Dancers), a professional company, and the Towson State University Dance Company.

The Dance major program is designed to provide a balance between *learning to dance* and *learning about dance* by following the total spectrum of dance from its physical activity to its expression as a creative art form.

The dance student pursues the development of technical, pedagogical and choreographic ability, and explores the scientific, philosophical and historical foundations of dance. Inter-disciplinary experiences closely relate to all aspects of the discipline. Here the undergraduate has the opportunity to explore, succeed, fail, and try again. It is to this end that the plan of study is intended to produce intelligent, knowledgeable and highly skilled young performing artists of the dance.

Towson State University is the only institution of higher education in Maryland to offer the professional and prestigious Bachelor of Fine Arts degree in Dance. All students major in Dance Performance. Students may elect to add the education component. Certification in Labanotation is available in conjunction with the Dance Notation Bureau in New York. Towson State University is an accredited institutional charter member of the National Association of Schools of Dance. The dance major program is also accredited by the National Council for Accreditation of Teacher Education and the National Association of State Directors of Teacher Education and Certification.

Career Opportunities

Undergraduates currently enrolled at Towson State supplement their studies with part-time work teaching and choreographing for local institutions and agencies. During the summer months many students dance professionally at theme parks such as Kings Dominion, Busch Gardens, Opryland and Disneyworld.

To date, the majority of Towson State graduates in dance are employed in full- and part-time dance positions ranging from professional performers and university faculty members to teachers in public schools and private studios. Many go on to graduate school to further their dance education.

ADMISSION TO THE MAJOR

Students must first submit a written application to the Admissions Office. Once accepted to the university, students must audition for the Dance major. Auditions are held periodically throughout the year; prospective majors should contact the Dance Department for specific dates and an audition application form. The auditions determine the following:

1. acceptance into the Dance major
2. technical level for class placement
3. scholarship recipients

TRANSFER STUDENT POLICY

Students transferring from other institutions must complete a minimum of 20 credits of their dance course requirements in residence at Towson State.

MAJOR IN DANCE PERFORMANCE

The major in Dance Performance leads to the Bachelor of Fine Arts degree. Students in the major must complete 40 credits of required dance courses, 22 credits of required interdisciplinary courses, 18 credits of dance electives, 40 credits of remaining General University Requirements, and the Performance Requirement outlined below. A grade of "C" or higher is required in all courses in the major.

Requirements for the Major

Dance Courses (40 credits)

Students not required to take beginning level courses (as determined in the auditions) can earn the waived credits by taking Supervised Study courses at the intermediate and advanced levels.

DANC.103	Beginning Ballet I (2)
DANC.104	Beginning Ballet II (2)
DANC.107	Beginning Modern Dance I (2)
DANC.108	Beginning Modern Dance II (2)
DANC.109	Jazz Dance I (2)
DANC.203	Intermediate Ballet I (2)
DANC.204	Intermediate Ballet II (2)
DANC.207	Intermediate Modern Dance I (2)
DANC.208	Intermediate Modern Dance II (2)
DANC.303	Advanced Ballet I (2)

DANC.304	Advanced Ballet II (2)
DANC.307	Advanced Modern Dance I (2)
DANC.308	Advanced Modern Dance II (2)
DANC.309	Jazz Dance II (2)
DANC.321	History of the Dance (3)
DANC.331	Dance Composition I (3)
DANC.332	Dance Composition II (3)
DANC.431	Dance Composition III (3)

Interdisciplinary Courses (22 credits)

BIOL.110	Contemporary General Biology (4)
BIOL.213	Human Anatomy & Physiology I (4)
MUSC.101	Introduction to Music Literature (3)
MUSC.105	Elements of Music Theory (3)
THEA.245	Stage Makeup I (2)
THEA.255	Stage Lighting I (3)
THEA.353	Costume Design I (3)

Electives (18 credits)

DANC.001	Minimester Dance Workshop (3)
DANC.002	Classical Ballet Partnering (3)
DANC.111-211	Tap Dance I & II (2,2)
DANC.251	Techniques of Teaching Creative Movement (3)
DANC.310	Jazz Dance III (2)
DANC.323	Labanotation (3)
DANC.341-342	Pointe Technique I & II (2,2)
DANC.370-379	Special Topics in Dance (1-3)
DANC.381-382	Dance Company (2,2)
DANC.401-405	Supervised Study: Ballet (2,2,2,2,2)
DANC.406	Advanced Ballet III (2)
DANC.407-410	Supervised Study: Modern Dance (2,2,2,2)
DANC.411-413	Supervised Study: Pointe (2,2,2)
DANC.414	Supervised Study: Jazz Dance (2)
DANC.433-434	Dance Production I & II (3,3)
DANC.441	Pointe Technique III (2)
DANC.451	Teaching Dance in Grades K-12 (3)
DANC.481-482	Dance Company (2,2)
DANC.495	Independent Study in Dance (1-3)

Performance Requirements for Majors

To fulfill performance requirements for graduation, dance majors must audition for the TSU Dance Company a minimum of two times during their tenure at Towson State and must fulfill one of the following:

1. Perform with the TSU Dance Company (audition required) for a minimum of 2 years (4-8 credits possible)
or
2. Perform in a minimum of 15 works composed in sections of Dance Composition II and III other than in those sections taken for credit by the student; maximum of 3 works may be from those selected for "Dance Majors Performance Project."
or
3. Approved plan by Department Chair for a combination of numbers 1 and 2 above
or
4. Transfer students must consult with the Chair of the Dance Department to arrange equivalent performing experiences.

MAJOR IN DANCE PERFORMANCE AND EDUCATION

Dance majors may also wish to obtain certification to teach dance at the elementary and secondary levels. Students in this program receive certification to teach public school in Maryland and reciprocal states upon graduation. The program leads to the Bachelor of Fine Arts degree in Dance Performance and Education.

Students in the Dance Teacher Certification Program should contact the chair of the Dance Department for information on the standards of the program and requirements for student teaching.

Students must complete the required dance courses (40 credits), the required interdisciplinary courses (22 credits), remaining General University Requirements (37 credits), the Performance Requirement outlined above, and the following dance and education courses (33 credits).

DANC.251	Techniques of Teaching Creative Movement (3)
DANC.451	Teaching Dance in Grades K-12 (3)
PSYC.101	General Psychology (3)
PSYC.201	Educational Psychology (3)
SCED.319	Survey of Educational Programs (3)
EDUC.401	Foundations of Education (3)
EDUC.382	Student Teaching in Elementary School (6)
SCED.382	Student Teaching in Secondary School (6)
SPED.301	Introduction to Special Education: K-12 (3)

MEETING GENERAL UNIVERSITY REQUIREMENTS

Dance courses may be used to fulfill Group II of the General University Requirements. DANC.321 History of the Dance, an advanced writing course, may be used to fulfill Group IC.

SCHOLARSHIPS

To qualify for a dance scholarship, students must be full-time Dance majors and members of the TSU Dance Company. Scholarships are renewed as long as the criteria are met and the student remains in good academic standing.

DEPARTMENTAL ACTIVITIES

The Towson State University Dance Company gives performing experience to qualified students through participation in a company that reflects the spirit of the university. The company presents over 15 lecture-demonstrations, concert and television performances, and residencies each year in public and private schools, colleges and universities throughout the state and region. Featuring a repertoire of ballet, modern dance, and jazz/musical theatre dance, each year professional guest choreographers are invited to stage their compositions for the company.

Other departmental activities include: Sigma Rho Delta, a national dance honorary; Children's Dance Division for ages 4-18; an extensive summer program of credit and non-credit courses and the International Ballet Symposium; a Summer Dance Camp for ages 10-18; professional dance companies and guest instructors/choreographers as visiting artists-in-residence; TED (Towson Ensemble Dancers), a professional company in-residence at TSU.

Department of Music

Professors: ALPER, BRUNGARDT, CYR, DRUCKER, GRISWOLD, LAWRENCE, MARCHAND (*Chair*), MYERS, REYES

Associate Professors: BRISCUSO, LEVY, MELICK, RAUSCHENBERG, SZABO

Assistant Professors: ANTHONY, BARCZYK, CLARK, CRAWFORD, JEZIC, MERANI, MOORE, PALANKER, G. PHILLIPS, SPACHT, TAN, TERWILLIGER, THOMPSON

Instructors: DECKER, FRANKEL, KNORR, ROTHLSBERGER, WATTS

Assistant Instructor: D. PHILLIPS

OFFICE

Fine Arts Center, Room 375, (301) 321-2839

PROGRAMS OF THE DEPARTMENT

The Music Department offers two major degree programs in music: a *Bachelor of Arts with concentrations in Vocal Performance and Music Literature*, and a *Bachelor of Science with concentrations in Instrumental Music Education, Vocal-General Music Education, Theory, Instrumental Performance, and Jazz/Commercial Music*. Students enrolled in B.S. programs may, upon completion of the language requirement, receive a B.A. degree. Students pursuing the B.A. degree are required to complete the intermediate courses, or the equivalent, of a modern foreign language. Although there are many courses common to all degree programs and concentrations, each is designed with many of its own special requirements, especially in the junior and senior years. These requirements are found on the following pages. A *music minor* is available for those students who desire to pursue music studies as a secondary field.

Students who wish to apply to the Music Department must write to the chair of the Music Department as well as the Director of Admissions of the university. Applicants will receive information from both offices regarding the necessary entrance requirements and procedures. Admission to the university does not guarantee acceptance into these majors.

Every Music major must enroll for Private Lessons on an instrument or in voice with an instructor provided by the university. All students must perform before a faculty jury at the end of each semester in which they are enrolled in Private Lessons.

In order to continue into the upper-division level, students will be evaluated during their fourth semester as to their academic and performing competencies. This assessment will include an extended jury examination of at least double length.

All students, excepting those pursuing concentrations in Theory and Literature, will perform in recital with the permission of their applied instructors. The Music Education concentrations require a Senior Recital, while the Performance concentrations require both a Junior Recital and a Senior Recital. Students must enroll in Private Lessons the semester(s) of their recital(s). Senior Recital may not be taken during the same semester as student teaching in the music education programs.

All students must reach a level of piano proficiency established for each degree and concentration. Class Piano and Keyboard Harmony are courses designed to assist students in meeting this requirement. Music Education, Organ, Theory, and Literature majors must pass a Piano Proficiency Test administered each semester. All other programs allow the student to take either the aforementioned classes with a grade of at least "B," or pass the Piano Proficiency test.

Ensemble participation is required for all students. Each degree program and/or concentration has its own set of expectations. These are listed under the degree requirements found on the following pages.

Students enrolled in Band, Orchestra, and the methods courses in Guitar, String, Woodwind, and Brass who choose to use a university-owned instrument shall pay a \$15 laboratory fee per semester. Students enrolled in percussion class shall pay a \$10 laboratory fee per semester. There is also a \$15 fee assessed each student who performs in recital.

All students are required to attend 60 approved on-campus recitals/concerts before permission is granted to perform in senior recital. Of these 60, 15 must be faculty performances.

Majors must earn at least a "C" semester grade in all music major courses, ensembles, and lessons. Besides the required music major courses, all students must fulfill the General University Requirements found elsewhere in this *Catalog*. Note: 1) Group II requirement in music is automatically fulfilled, and 2) Music History II fulfills Group I-C advanced writing course requirement. University regulations require that students accrue no less than 32 upperdivision (300, 400) credits for graduation. This require-

ment is automatically met in all degrees/concentrations except Jazz Performance.

The Music Department also participates in the Elementary Education Program by offering, to those majors, Music Fundamentals, and a specific section of Teaching Music in the Elementary School.

CORE COURSES

The following core courses (28 credits) are required for all majors and concentrations in the Music Department.

MUSC.102	Music Literature for Music Majors (3)
MUSC.131	Theory I (2)
MUSC.132	Theory II (2)
MUSC.133	Musicianship I (2)
MUSC.134	Musicianship II (2)
MUSC.231	Theory III (2)
MUSC.232	Theory IV (2)
MUSC.233	Musicianship III (2)
MUSC.234	Musicianship IV (2)
MUSC.301	History of Music I (except for all Jazz concentrations) (3)
MUSC.302	History of Music II (3)
MUSC.435	Form and Analysis (except for Jazz performance concentration) (3)

MAJOR IN MUSIC EDUCATION

Students majoring in Music Education are required to complete the core courses (28 credits), the education core courses (24 credits), and the General University Requirements. Students choose from two areas of concentration: the Vocal-General Music Education concentration (31-36 credits) and the Instrumental Music Education concentration (37-38 credits). Students in this program receive certification to teach music at the K-12 level in Maryland upon graduation.

Requirements for the Major

Music Education Professional Core Courses (27 credits)

PSYC.101	General Psychology (3)
PSYC.201	Educational Psychology (3)
SPED.301	Introduction to Special Education, K-12 (3)
SCED.319	Survey of Education (3)
EDUC.401	Foundations of Education (3)
ELED.391	Elementary Student Teaching (6)
SCED.391	Secondary Student Teaching (6)

Vocal—General Music Education Concentration (31-36 credits)

	Applied Private Lessons (7)
	Six semesters in ensemble, five of which must be in University Chorale or Choral Society, one of which may be in Early Music Ensemble or Chamber Singers; additional voice major requirement, one semester Opera Workshop; additional guitar requirement, 4 semesters Guitar Ensemble.
MUSC.221	Voice Class I: guitar and keyboard majors only (1)
MUSC.222	Voice Class II: guitar and keyboard majors only (1)
MUED.241	Teaching Guitar in the Classroom (2)
MUSC.327	Choral Conducting (3)
MUSC.335	Choral and Instrumental Arranging (3)
MUED.307	Methods of Teaching Vocal-General Music in the Elementary School (4)
MUED.309	Methods of Teaching Vocal-General Music in the Secondary School (2)
MUED.337	Teaching Choral Music in the Elementary and Secondary School (2)
MUSC.499	Senior Recital (1)

Instrumental Music Education Concentration (37-38 credits)

	Applied Private Lessons (7)
	Ensembles: wind and percussion majors, 6 semesters in Band or Orchestra, 2 semesters in Marching Band, 1 semester in Conducting Lab Ensemble; string majors, 7 semesters in Orchestra or Band, 1 semester in Marching Band, 1 semester in Conducting Lab Ensemble
MUSC.221	Voice Class I (1)
MUSC.211	Brass Class I (brass majors omit) (1)
MUSC.212	Brass Class II (1)
MUSC.215	Percussion Class I (1)
MUSC.216	Percussion Class II (1)
MUSC.236	Percussion Workshop (percussion majors only who omit MUSC.215/216) (1)
MUSC.219	Lower String Class (1)
MUSC.220	Upper String Class (1)
MUSC.223	Woodwind Class I (1)
MUSC.224	Woodwind Class II (1)
MUSC.307	Marching Band Techniques (0.5)
MUSC.329	Instrumental Conducting (3)
MUSC.335	Choral and Instrumental Arranging (3)
MUED.306	Methods of Teaching Instrumental Music in the Elementary Schools (4)
MUED.308	Methods of Teaching Instrumental Music Secondary (2)
MUSC.499	Senior Recital (1)

MAJOR IN MUSIC

Students majoring in Music are required to complete the core courses (28 credits), the concentration requirements (45-49 credits) and the General University Requirements. Areas of concentration include Performance, Theory and Literature, and Jazz/Commercial.

Requirements for the Major

Performance Concentrations

Voice Performance Concentration (49 credits)

	Applied Private Lessons (16)
	Ensemble: 6 semesters in either University Chorale, Choral Society, or Women's Chorus; 2 semesters in Opera Workshop; 4 credits from above or from Early Music Ensemble or Chamber Singers (12)
MUSC.245	Diction for Singers I (English & Italian) (2)
MUSC.246	Diction for Singers II (French & German) (2)
MUSC.327	Choral Conducting (3)
MUSC.399	Junior Recital (1)
MUSC.406	Survey of Solo Voice Literature (3)
MUSC.499	Senior Recital (1)
MUSC.xxx	Electives selected from upper-division literature or theory three-credit courses (9)
	Intermediate level in German, or French, or Italian

Guitar Performance Concentration (48 credits)

	Applied Private Lessons (16)
	Ensemble: 8 semesters of Guitar Ensemble; 4 additional credits in any ensemble (12)
MUSC.327	Choral Conducting (3)
	or
MUSC.329	Instrumental Conducting (3)
MUSC.399	Junior Recital (1)
MUSC.409	History and Literature of Guitar, Lute and Vihuela (3)

MUSC.499 Senior Recital (1)
MUSC.xxx Electives selected from upper-division literature or theory three-credit courses (12)

Keyboard Performance Concentration (47 credits)

Applied Private Lessons (16)
Applied Voice Lessons (organ majors take additional voice lesson) (1) Ensemble: Piano majors take 6 semesters in Solo/Ensemble Accompanying, 2 credits in any other ensemble; organ majors take six semesters in choral ensembles, 2 in any other ensemble. (8)
MUSC.221 Voice Class I (organ majors) (1)
MUSC.327 Choral Conducting (3)
or
MUSC.329 Instrumental Conducting (3)
MUSC.399 Junior Recital (1)
MUSC.410 Survey of Organ Literature (organ majors only) (3)
MUSC.417 Piano Literature (piano majors only) (3)
MUSC.499 Senior Recital (1)
MUSC.xxx Electives selected from upper-division literature or theory three-credit courses (15)

String/Winds/Percussion Performance Concentration (49 credits)

Applied Private Lessons (16) Ensembles: 8 semesters in either band or orchestra; 8 semesters of other instrumental ensembles chosen under the supervision of the ensemble directors and applied teachers (16)
MUSC.329 Instrumental Conducting (3)
MUSC.399 Junior Recital (1)
MUSC.499 Senior Recital (1)
MUSC.xxx Electives selected from upper-division literature or theory three-credit courses (12)

Theory and Literature Concentrations

Theory/Composition Concentration (47 credits)

Applied Private Lessons (8)
Ensemble: 1 each semester (8)
MUSC.221 Voice Class (1)
MUSC.304 Basic Composition (3)
or
MUSA.387 Comp. Priv. Lessons
MUSC.335 Choral and Instrumental Arranging (3)
MUSC.327 Choral Conducting (3)
or
MUSC.329 Instrumental Conducting (3)
MUSA.388 Comp. Priv. Lessons (2)
MUSA.487 Comp. Priv. Lessons (2)
MUSA.488 Comp. Priv. Lessons (2)
MUSC.407 Tonal Counterpoint (3)
MUSC.408 Modal Counterpoint (3)
MUSC.431 Advanced Arranging (3)
MUSC.xxx Electives selected from upper-division literature or theory three-credit courses (6)

Music Literature Concentration (49 credits)

Applied Private Lessons in one medium (8)
Ensemble: 1 each semester (8)
MUSC.335 Choral and Instrumental Arranging (3)
MUSC.407 Tonal Counterpoint (3)
MUSC.493 Independent Research in Music Literature (3)

MUSC.xxx 15 elective credits selected from upper-division literature courses: 9 elected credits selected from either upper division literature courses or from theory courses (24)
Intermediate level in any foreign language

Jazz/Commercial Concentrations

Theory/Composition Concentration (45 credits)

Applied Private Lessons (8)
Composition Private Lessons (8)
Ensembles: 8 semesters in jazz ensemble; 6 credits of other instrumental ensembles chosen under the supervision of the ensemble directors and applied teachers (14)
MUSC.323 Jazz Theory (3)
MUSC.325 Jazz Repertoire (3)
MUSC.427 Jazz Arranging (3)
MUSC.429 Jazz Improvisation I (3)
MUSC.430 Jazz Improvisation II (3)

Performance Concentration (46 credits)

Applied Private Lesson (saxophone majors; 8 credits on sax and 8 credits on at least one woodwind double; bass majors, 8 credits on acoustic, 8 credits on electric; guitar majors, 8 credits on jazz/commercial, 8 credits on classical. (16)
Ensembles: 8 semesters of jazz; 8 credits of other instrumental ensembles chosen under the supervision of the ensemble directors and applied teachers (16)
MUSC.323 Jazz Theory (3)
MUSC.325 Jazz Repertoire (3)
MUSC.399 Junior Recital (1)
MUSC.429 Improvisation I (3)
MUSC.430 Improvisation II (3)
MUSC.499 Senior Recital (1)

MINOR IN MUSIC

A Music minor is available for those students who desire to pursue music studies as a secondary field. The minor in Music requires 24 credits in the following courses.

MUSC.102 Music Literature for Music Majors (3)
MUSC.105 Elements of Music Theory (or a music major theory course based upon Theory Placement Test results) (3)
MUSC.xxx Electives in lower-division courses selected after advisement with chair (6)
MUSC.xxx Electives in upper-division courses selected after advisement with chair (12)

GENERAL UNIVERSITY REQUIREMENTS

The Music Department also offers courses designed for students who are non-music majors or minors. These courses are primarily taken to satisfy a General University Requirement. The department has specifically recommended several courses, within their catalog descriptions, which it believes best meet the intent of the GURs.

TRANSFER CREDIT POLICY

Transfer of major credits is based upon an audition, a theory placement test, and an interview with the department chair. At the minimum, students are required to complete 24 major credits at Towson.

GRADUATE PROGRAM

The department offers a master's degree in Music Education. Entrance requirements and the program of study are available from the department's graduate coordinator.

John

Department of Speech and Mass Communication

Professors: COWAN, MATLON (*Chair*)

Associate Professors: BOSLEY, LEV, LOGUE, VATZ

Assistant Professors: BLAKLEY, BRADLEY, FALLEN, FLIPPEN, KIM, MacKERRON, McELREATH, MIDURA, MOORE, SCODARI, WEISS

Instructors: STANLEY, STEINBERG

Visiting Instructor: THORSETT

OFFICE

Van Bokkelen Hall, Room 109, (301) 321-2891, 321-2890

PROGRAMS OF THE DEPARTMENT

The Speech and Mass Communication Department offers the following programs of study: the *Speech Communication major*, the *Mass Communication major*, minors in both *Speech Communication and Mass Communication*, and the *Master of Arts in Mass Communication*.

The curricula in the department are designed to provide a broad liberal education as well as special professional training with emphasis placed upon acquiring knowledge as well as skill.

Students who wish to qualify for either major must register with the Department of Speech and Mass Communication and declare their major. Students electing majors should register as soon as possible in their college careers, preferably early in their freshman year and certainly no later than the beginning of their sophomore year. Students who wish to major in Mass Communication and minor in Speech Communication or vice versa may "cross-over" or apply 12 credits from the major to the appropriate minor. The student wishing to major in either area in the department should call for an appointment to talk with an academic advisor.

The Speech and Mass Communication programs at Towson State University prepare students for various careers. For example, graduates are employed by radio and television stations, newspapers, film companies, public relations firms, and governmental agencies. The program also prepares students for graduate school.

MAJOR IN SPEECH COMMUNICATION

The public and private sectors search for college graduates with competencies in oral communication—speaking and listening skills in contexts of interpersonal, organizational, and public communication. Within an organization, 80 percent of the communication is oral, while 20 percent is written. Thus those students majoring in Speech Communication should be an asset to any organization from government agencies, private industry, public institutions to graduate programs in communication. Specifically, a Speech Communication major/minor could lead to employment in such areas as personnel, sales, lobbying, internal communication, law, public relations, higher education instruction, and communication consulting.

Requirements for the Major

The major in Speech Communication requires 36 credit hours in speech and mass communication courses. Students must complete 12 credit hours of core courses, nine credit hours of performance courses, nine credit hours of theory courses, three credit hours of media courses, and three credit hours in an elective course. The Pass/D/F option is *not* available for courses applied to the major or minor. The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language

requirement can be met by completing the intermediate level of a modern foreign language or the equivalent.

Core Courses (12 credits)

SPCH.131	Fundamentals of Speech Communication (3)
MCOM.211	Communication Process (3)
SPCH.321	Interpersonal Communication (3)
SPCH.419	Organizational Communication (3)

Performance Courses (9 credits)

MCOM.315	Business and Professional Communication (3)
SPCH.221	Oral Interpretation of Literature (3)
SPCH.249	Forensics I (1)
SPCH.250	Forensics II (1)
SPCH.303	Advanced Public Speaking (3)
SPCH.320	Readers Theatre (3)
SPCH.331	Advocacy and Argument (3)
SPCH.349	Forensics III (1)
SPCH.350	Forensics IV (1)

Theory Courses (9 credits)

MCOM.213	Listening (3)
SPCH.216	Group Discussion (3)
SPCH.301	Non-Verbal Communication (3)
SPCH.304	Persuasion (3)
SPCH.420	Communication in the Legal Process (3)
SPCH.495	Independent Study in Speech Communication (3)

Media Courses (3 credits)

MCOM.151	Introduction to Journalism (3)
MCOM.201	Introduction to Broadcasting (3)
MCOM.202	Introduction to Film (3)
MCOM.271	Television Production I (3)
MCOM.352	Media Criticism (3)
MCOM.353	Publicity and Public Relations (3)
MCOM.355	Newswriting (3)

Elective (3 credits)

One additional course must be selected from those courses listed above.

MINOR IN SPEECH COMMUNICATION

The Speech Communication minor requires 24 credit hours. The minor includes the core courses, a performance course, a theory course, a media course and an elective from those courses listed above. At least 12 of the 24 credits must be upper division.

MAJOR IN MASS COMMUNICATION

This program offers a broad understanding of the processes, functions and responsibilities of mass communication. Development of skills in fact finding, analysis and communication through the mass media is stressed. The program prepares the student for graduate work and offers excellent background for many careers such as law, public relations, business, communications media, sales and management. Flexibility is purposely built into the program so that the needs of students with special objectives may be met. Majors are advised to obtain a broad background in the fine arts, humanities, and social sciences.

Requirements for the Major

The major in Mass Communication requires 36 credit hours in speech and mass communication courses. Students must complete 18 credits in core courses and 18 credits in elective courses. The Pass/D/F option is *not* available for courses applied to the major

or minor. The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate level of a modern foreign language or the equivalent.

Core Courses (18 credits)

MCOM.151	Introduction to Journalism (3)
MCOM.201	Introduction to Broadcasting (3)
MCOM.202	Introduction to Film (3)
MCOM.211	Communication Process (3)
MCOM.315	Business and Professional Communication (3)
MCOM.353	Publicity and Public Relations (3)

Electives (18 credits)

One of the following

MCOM.265	Radio Production I (3)
MCOM.267	Filmmaking I (3)
MCOM.271	Television Production I (3)

One of the following

MCOM.355	News writing (3)
MCOM.356	Feature Writing (3)
MCOM.377	Broadcast Film Writing (3)
MCOM.496	Independent Study in Journalism (3)
MCOM.497	Independent Study in Public Relations (3)

Twelve credits of mass communication (MCOM) or speech (SPCH) courses. These credits may not include the following: SPCH.131, Fundamentals of Speech Communication, the 18 credits of core courses, or the six credits of electives selected above. No more than six credits of independent study and/or practicum can be applied to the major.

MINOR IN MASS COMMUNICATION

Requirements for the Minor

Core Courses (18 credits)

MCOM.151	Introduction to Journalism (3)
MCOM.201	Introduction to Broadcasting (3)
MCOM.202	Introduction to Film (3)
MCOM.211	Communication Process (3)
MCOM.315	Business and Professional Communication (3)
MCOM.353	Publicity and Public Relations (3)

Electives (6 credits)

One of the following

MCOM.265	Radio Production I (3)
MCOM.267	Filmmaking I (3)
MCOM.271	Television Production I (3)
MCOM.355	News writing (3)
MCOM.358	News editing and Copyreading (3)
MCOM.377	Broadcast Film Writing (3)

Three semester hours of Mass Communication or Speech courses except SPCH.131 (Fundamentals of Speech Communication), the 18 credits of core or the 3 credits of electives above. No more than six credits of independent study and/or practicum can be applied to the minor.

TRANSFER CREDIT POLICY

Transfer students should register with the department during their first semester at the university. Transfer students are required to take 20 hours in residence in their major area. The department will transfer into the major or minor up to 16 semester hours of compatible lower-division courses from local community colleges. Upon admission to the university, transferees are responsible for meeting with their advisors to formalize this transfer of credits. Students are strongly urged not to take courses in the major at the community college level if they plan to transfer; rather, they should work on General University Requirements. Transfer students from other institutions will be required to petition the de-

partment for transferring up to 16 semester hours into the major or minor. Applications for transfer of credits are the responsibility of the student. The applications and examinations will be reviewed by the faculty and the students will be notified as to the status of their application.

DEPARTMENTAL SCHOLARSHIPS

The Patrick J. O'Connell Memorial Scholarship is available for Mass Communication students with a special interest in Broadcast Journalism, Cinematography, Journalism or Public Relations. The department also offers five Dean's Talent Scholarships each year for students with at least 18 hours completed in their major. Other scholarships include The Eddie Ballard Award for Journalism, The Broadcasting Scholarship Endowment, The Charles Evans Memorial Scholarship for students interested in Real Estate Journalism, The George Rogers, Jr. Memorial Scholarship, and The Public Relations Society of America Scholarship. For scholarship information and deadlines contact the department scholarship coordinator.

DEPARTMENTAL ACTIVITIES

Departmental activities include support for the following active student organizations: Forensics Union (Debate Team), Pi Kappa Delta (national honorary forensics society), Society of Professional Journalists, National Honorary Broadcasting Society (Alpha Epsilon Rho-AER), Film Society, and the Public Relations Student Society of America. Students are also encouraged to participate in the campus radio stations, WTSR-AM and WCVT-FM.

GRADUATE PROGRAM

The Master of Arts degree in Mass Communication is structured to integrate communicology, film, journalism, public relations, radio and television. By emphasizing the interrelationships and interactions of various media, the program is modeled upon an holistic design.

Students who complete the Master of Arts degree in Mass Communication should develop an in-depth knowledge of the history, philosophy, research methods and professional media skills appropriate to their academic pursuits and career goals.

Detailed information regarding the program is given in the *Graduate School Catalog*.

Department of Theatre Arts

Professor: C. R. GILLESPIE

Associate Professors: BAKER, LOESCHKE, (Chair), MANLOVE

Assistant Professors: PIERSON, WAINSCOTT

Part-Time Faculty—Regular: S. GILLESPIE, VOYTILLA

Part-Time Faculty: BILGRAVE, CASCIERO, DOSTER, JAMES, PENNIMAN, SHUB, STRUEBER, VALERIO

Staff: CASCELLA, PARTRIDGE

OFFICE

Fine Arts Center, Room 354, (301) 321-2792, 321-2793

PROGRAMS OF THE DEPARTMENT

The Department of Theatre Arts offers the *major* and *minor* in *Theatre Arts*. Theatre majors must complete one of four areas of concentration: Acting/Directing, Technical Theatre and Design, Costume Design/History and Construction or General Theatre.

The curriculum in the department is designed to provide the best possible learning and training for the student wishing to major in Theatre Arts. The program is designed to provide, in cooperation with other departments, a broad liberal education as well as specialized professional training with the emphasis placed upon skills as well as knowledge. The main emphasis is the creation of an artistic point of view on the part of the student.

The major in Theatre Arts is time consuming and physically demanding. Participation in Mainstage and Studio productions is a part of the educational program. All Theatre majors are required to participate in crew work for productions. Majors must be free to participate in theatre activities on weekends and evenings.

MAJOR IN THEATRE ARTS

Theatre Arts majors must complete 42 credit hours in theatre, at least 15 of which must be in the 300-400 level. The major program consists of 27 credits of required courses and a minimum of 15 elective credits in theatre selected from one of the 4 areas of concentration. Students are expected to take any necessary lower-division prerequisites before attempting the required upper-division electives. Students are also expected to complete all courses required for their track.

Requirements for the Major

Theatre courses (27 Credits)

THEA.101	Beginning Acting (3)
THEA.125	Script Analysis (3)
THEA.211	History of Theatre & Drama I (3)
THEA.212	History of Theatre & Drama II (3)
THEA.213	History of Theatre & Drama III (3)
THEA.241	Costume History and Design (3)
	or
THEA.242	Costume History and Design (3)
THEA.251	Stagecraft I (3)
THEA.491	Theatre Production (3)
THEA.499	Special Project in Theatre Research (3)

There are four tracks in the Theatre Department. Majors must select a track and work with a faculty advisor to select courses in that area of concentration.

In addition to the 27 required credits, the student must take the remaining 15 credits in one of the four areas of concentration.

Acting/Directing Track

Acting Sequence*

Level One	THEA.101	Beginning Acting (3)
Level Two	THEA.221	Intermediate Acting I (3)
	THEA.105	Movement Drill for the Actor (3)
	THEA.111	Voice Drill for the Actor (3)
Level Three	THEA.309	Intermediate Acting II (6)
Level Four	THEA.313	Scene Study I (3)
	THEA.205	Theatre Games (3)
Level Five	THEA.315	Scene Study II (3)
	THEA.425	Problems in Acting Style (1-9)
	THEA.487	Professional Theatre Seminar (1-12)
	THEA.489	Senior Acting Seminar (3)
	THEA.493	Problems in Theatre (1-9)

* Students need faculty permission to progress to next level.

Acting/Directing Enrichment Courses

THEA.203	Voice Production for the Actor (3)
THEA.231	Mime I (3)
THEA.245	Stage Makeup I (2)
THEA.246	Stage Makeup II (2)
THEA.261	Acting for Musical Theatre I (3)
THEA.262	Acting for Musical Theatre II (3)
THEA.301	Techniques of Comedy

THEA.305	Feminist Theatre (3)
THEA.307	Theories of Theatre (3)
THEA.332	Mime II (3)
THEA.343	Advanced Voice Production for the Actor (3)
THEA.405	Acting & Writing for Feminist Theatre (f3)

Directing

THEA.331	Play Directing I (3)
THEA.421	Play Directing II: The Contemporary Play (3)
THEA.427	Problems in Directing (1-9)

Theatre Design & Technical Production Track

Lighting Design

THEA.141	Graphic Techniques (3)
THEA.201	Scenery Design I (3)
THEA.209	Sound Design (3)
THEA.251	Stagecraft I (3)
THEA.255	Stage Lighting I (3)
THEA.307	Theories of Theatre (3)
THEA.351	Stagecraft II (3)
THEA.355	Stage Lighting II (3)
THEA.429	Problems in Technical Theatre (1-9)
THEA.480	Problems in Design (1-9)
THEA.487	Professional Theatre Seminar (1-12)

Scenery Design

THEA.141	Graphic Techniques (3)
THEA.201	Scenery Design I (3)
THEA.251	Stagecraft I (3)
THEA.255	Stage Lighting I (3)
THEA.307	Theories of Theatre (3)
THEA.351	Stagecraft II (3)
THEA.361	Scenery Design II (3)
THEA.429	Problems in Technical Theatre (1-9)
THEA.445	Scene Painting (3)
THEA.480	Problems in Design (1-9)
THEA.487	Professional Theatre Seminar (1-12)

Stage and Production Management

THEA.141	Graphic Techniques (3)
THEA.201	Scenery Design I (3)
THEA.209	Sound Design (3)
THEA.255	Stage Lighting I (3)
THEA.257	Stage and Production Management (3)
THEA.331	Play Directing I (3)
THEA.421	Play Directing II: The Contemporary Play (3)
THEA.429	Problems in Technical Theatre (1-9)
THEA.480	Problems in Design (1-9)
THEA.487	Professional Theatre Seminar (1-12)

Technical Theatre

THEA.141	Graphic Techniques (3)
THEA.201	Scenery Design I (3)
THEA.209	Sound Design (3)
THEA.251	Stagecraft I (3)
THEA.255	Stage Lighting I (3)
THEA.257	Stage and Production Management (3)
THEA.351	Stagecraft II (3)
THEA.429	Problems in Technical Theatre (1-9)
THEA.443	Structural Design (3)
THEA.480	Problems in Design (1-9)
THEA.487	Professional Theatre Seminar (1-12)

Costume Design/History Track

THEA.125	Script Analysis (3)
THEA.241	Costume History and Design (3)
	or
THEA.242	Costume History and Design (3)
THEA.245	Stage Makeup I (2)

THEA.246	Stage Makeup II (2)
THEA.353	Costume Design I (3)
THEA.453	Costume Design II (3)
THEA.480	Problems in Design (1-9)
THEA.487	Professional Theatre Seminar (1-12)
THEA.493	Problems in Theatre (1-9)

General Theatre Track

Students may select from any of the courses offered by the department for this concentration, with the supervision of a theatre faculty advisor, including the courses below.

THEA.125	Script Analysis (3)
THEA.207	Theatre Arts for Children (3)
THEA.307	Theories of Theatre (3)
THEA.285	Beginning Theatre Workshop (4)
THEA.311	Children's Theatre Production (3)
THEA.407	Theatre Arts for Children, Advanced (3)
THEA.485	Advanced Theatre Workshop (4)

MINOR IN THEATRE ARTS

The Theatre Arts minor is required to take 24 credit hours in theatre. At least 12 of these hours must be at the upper-division level. The student is required to take one acting course and one

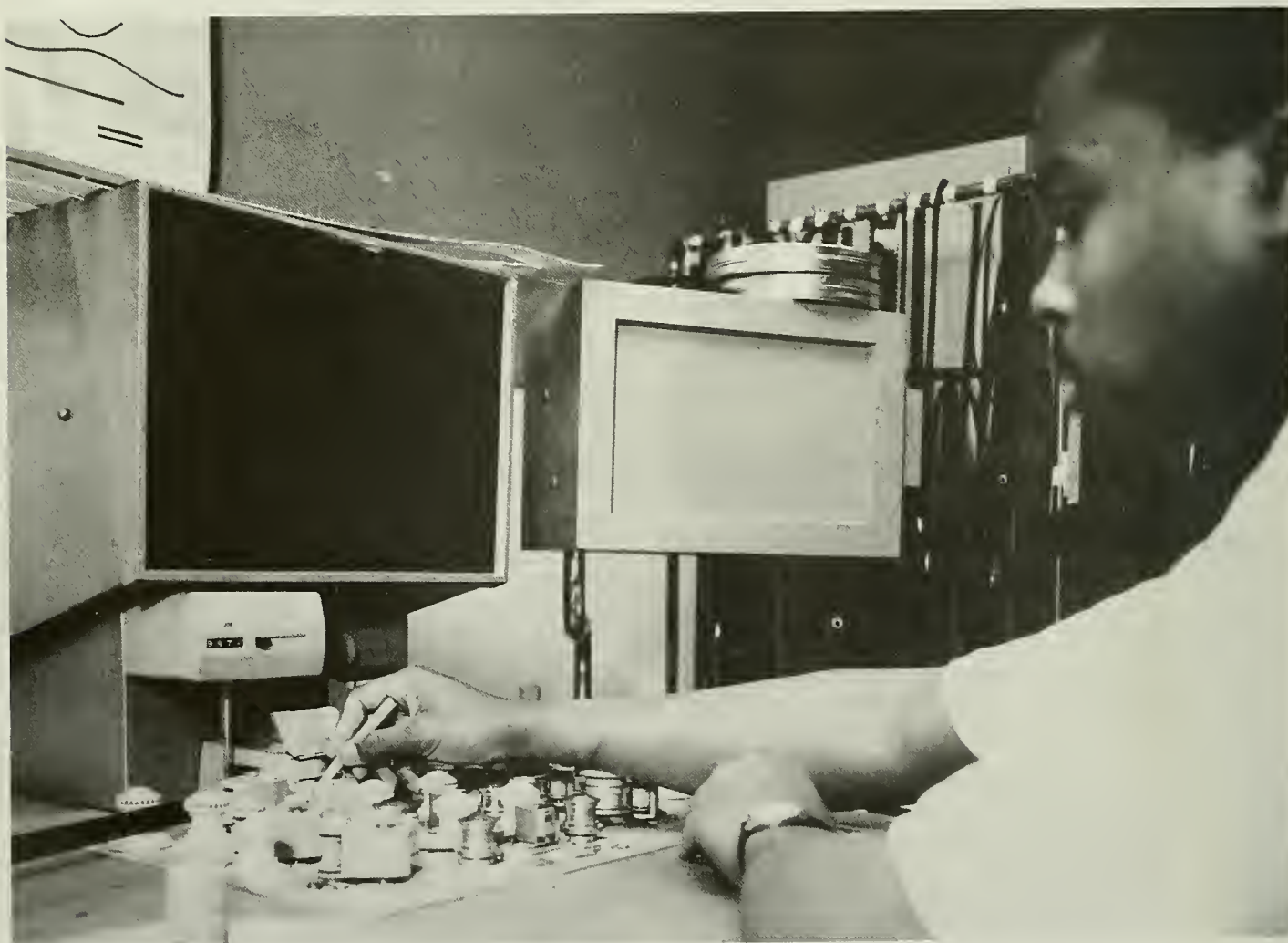
course in the Technical Theatre, Design or Costuming concentrations. The student must successfully complete three non-credit supervised production experiences. The student is encouraged to pursue an area of concentration in the department (Acting/ Directing, Technical Theatre/Design, Costuming, or General) under the supervision of an advisor.

MEETING GENERAL UNIVERSITY REQUIREMENTS

The Theatre Arts Department offers courses that are designed for students who are non-theatre majors or minors. These courses are primarily taken to satisfy a General University Group II requirement. Theories of Theatre (THEA.307) may be used to fulfill Group I-C.

TRANSFER CREDIT POLICY

Students transferring from other institutions and planning to major in Theatre Arts at Towson are required to complete a minimum of 20 hours of theatre arts courses at Towson. Transfer of credits toward the theatre major will be determined by the chair. Transfer students should schedule an interview with the chair at the first opportunity.









The College of Liberal Arts

The liberal arts are the core disciplines of the university, those disciplines whose business it is to study and interpret what it means to be human, both as individuals and as members of groups. Study of the liberal arts is liberating in that it frees us to think more clearly, to analyze and interpret information, to weigh points of view, to arrive at informed judgments about complex issues, and to appreciate the rich diversity of human culture.

Every matriculated undergraduate in the university will take courses in the College of Liberal Arts, courses designed to assist students in developing those comprehensive tools of skill and knowledge which mark the liberally educated person: objectivity in interpreting information, creativity in forming and expressing conclusions, clarity of expression, and the ability to move comfortably in the world of ideas and values.

More than 2500 undergraduates are majoring in the programs of the College of Liberal Arts, and over 300 graduate students are pursuing masters' degrees in the college. For these students, "doing" the liberal arts is an even more pervasive and intensive experience.

The end product of a liberal education is a total human being. In the words of James L. Ferguson, who leads one of the world's largest corporations, General Foods, there is a need throughout society for people "capable of a perceptive view of things in the whole as well as in part, those with the ability to comprehend and to empathize, to listen to people and to hear clearly what they say about their needs and aspirations, to elicit the needs and skills of others, to bring them together and work in concert toward a solution or an objective. I cannot conceive a more persuasive case for the value of a liberal arts education."

Annette M. Chappell, Dean

COLLEGE OFFICE

Linthicum Hall
Room 102A
(301) 321-2128

Department of English

Professors: CHAPPELL, COULTER, CRAVER (*Chair*),
FRIEDMAN, HAHN, HEDGES, JONES (*Chair*), SHEETS

Associate Professors: AVERY, BEHM, BERGMAN, DOWLING,
DOUGLAS, ECONOMOU, HILL, KOOMJOHN,
WILKOTZ, WOLKOWITZ, WOOD

Assistant Professors: BURLEY, CONNOLLY, COOK,
EDGINGTON, FRANKEL, GIBSON, GISSENDANNER,
GREENE, HILL, C., LEGAULT, LILLYWHITE, LOTT,
MAHIN, MIERS, NEWMAN, STAPEN, SULFRIDGE,
WOODSON

Instructors: AMPADU, BASS, BENNER, FOSTER, LEWIS,
SHALLER

OFFICE

Linthicum Hall, Room 219N, (301) 321-2871

PROGRAMS OF THE DEPARTMENT

To meet the needs of the full range of students at the university, the English Department offers several different programs: *General University Requirements* and electives, giving specific, practical training in the writing, reading and language skills necessary for a liberal education; the *English Major: Liberal Arts Track*, for students with a vocational interest in language and literature; the *English Major: Secondary-Education Track*, for students planning to teach English; the *English Major: Writing Track*, for students preparing to use writing as an occupational skill; the *English Minor*, for students who have an interest in literature but choose a different major; and the *Minor in World Literature*, for students who wish to explore interdisciplinary relationships in the study of English, History, and Modern Languages. In addition, the department supports General Studies concentrations in American Studies, Afro-American Studies, Ethnic Studies, and Women Studies.

All courses offered by the English Department encourage an appreciation of literature through reading, analysis, and writing. Since authors deal with every subject of human interest, English courses share the insights with many other disciplines. As a result, many students add a concentration in English to their regular programs, and others elect courses in English to broaden their academic experience. Today, such study becomes increasingly important not only for fulfilling vocational requirements but also for meeting the demands of daily life.

Foreign Language Recommendation

The department strongly recommends that students who plan to enter graduate study in English earn a B.A. by completing the intermediate level of a foreign language.

MAJOR IN ENGLISH

The undergraduate degree in English is now earned through completing one of three tracks.

The Liberal Arts Track (36 credits) is designed for those students with a vocational interest in language and literature, for those preparing for graduate study in English, and for those using an English major as foundation for entering a professional school (law, medicine, journalism, and others).

The Writing Track (42 credits) provides students with an opportunity to refine the techniques and applications of writing essential for careers as writing specialists in government, business, and industry.

The English Secondary Education Track (36 credits) prepares students to serve as teachers of English and language arts in middle, junior high, and senior high schools and to meet national and Maryland State standards for certification.

Requirements for all tracks are similar and established to assure that upon graduating from the university an English Major has not only specialized experience established through a particular track but also reasonable competence in each of the major methods for studying language and literature: studies of literary heritage; analysis and research; language and linguistics; writing.

More specifically, majors gain understanding of literary heritage through completing 18 credits of coursework including surveys of the development and historical periods of literature, studies of literary genre, and explorations of the thematic, topical, and metaphorical relationships of literature. An understanding of analysis and research derives from each student completing six to nine credits of coursework in formal analysis of genre, literary analysis and research, and an in-depth study of at least one major writer and related scholarship. A knowledge of linguistics comes through completing at least three upper-division credits of coursework in the area. Effective writing is assured both by the department's policy that all courses emphasize effective writing and by the requirement that every student complete six to nine credits in coursework centered on learning the techniques of exposition: College Writing or Honors College Writing; Literary Research and Applied Criticism; one upper-division course in expository writing.

In meeting requirements outlined above, a student will earn most of the 36 to 42 credits for the English major. However, apart from a few specified courses, the student has multiple options in choosing the subjects that fulfill requirements. Each student is encouraged to work closely with his or her departmental advisor to plan a program that is purposeful, one that simultaneously explores the student's interests and leads to coherent pattern of study.

Requirements for the Major

Liberal Arts Track

The Liberal Arts Track requires a total of 36 credits with a grade of "C" or better.

I. Literary Heritage (18 credits required)

A. Surveys of Development and Period

- ENGL.221 British Literature to 1798 (3)
- ENGL.222 British Literature Since 1798 (3)

Two of the following. One course from this group or from the Literary Genre group below must represent literature before 1798 (courses marked with an asterisk).

- ENGL.321 Medieval British Literature* (3)
- ENGL.323 British Renaissance Literature* (3)
- ENGL.324 British Literature of the Later Renaissance* (3)
- ENGL.325 Eighteenth-Century British Literature* (3)
- ENGL.326 Literature of the British Romantic Period (3)
- ENGL.327 The Victorian Age (3)
- ENGL.341 History and Literature of the Old Testament* (3)
- ENGL.431 Literature of the American Romantic Period (3)
- ENGL.432 Literature of the American Realistic Period (3)

B. Literary Genre

One of the following

- ENGL.322 British Medieval and Renaissance Drama* (3)
- ENGL.331 American Drama (3)
- ENGL.344 The Continental Novel (3)
- ENGL.345 Perspectives in World Drama* (3)
- ENGL.346 Modern Drama (3)
- ENGL.420 Development of the British Novel: Eighteenth Century* (3)

- ENGL.421 Development of the British Novel:
Nineteenth Century (3)
ENGL.422 Development of the British Novel:
Twentieth Century (3)
ENGL.423 Modern British Poetry (3)
ENGL.433 American Short Story (3)
ENGL.435 Development of the American Novel:
Nineteenth Century (3)
ENGL.436 Development of the American Novel:
Twentieth Century (3)
ENGL.437 American Poetry Through Frost (3)
ENGL.438 Modern American Poetry (3)

C. Thematic and Topical Course

One of the following

- ENGL.243 Classical Mythology (3)
ENGL.244 Introduction to Folklore (3)
ENGL.270 Ideas in Literature (3)
ENGL.271 Themes in American Literature (3)
ENGL.290 Special Studies in Literature (3)
ENGL.342 Folklore and Literature (3)
ENGL.343 Myth and Literature (3)
ENGL.347 World Literature Written in English (3)
ENGL.363 Film and Literature (3)
ENGL.370 Special Topics: Literature of Women (3)
ENGL.371 Women Poets: Themes and Images (3)
ENGL.372 Women Writers (3)
ENGL.373-79 Themes in Literature (3)
ENGL.471-74, 476-77 Topics (when applicable) (3)
ENGL.485-86 Seminar (when applicable) (3)

II. Analysis and Research (9 credits required)

A. Formal Analysis of Genre

The following course, or score of 70+ on departmental exam measuring skills in analyzing elements of poetry.

- ENGL.261 Elements of Poetry (3)

B. Literary Analysis and Research

- ENGL.361 Literary Research and Applied Criticism (3)

C. Study of Major Figure and Related Scholarship

*One of the following**

- ENGL.425 Chaucer (3)
ENGL.427 Shakespearean Comedy (3)
ENGL.428 Shakespearean Tragedy (3)
ENGL.429 Milton and The Humanist Tradition (3)

Note: With approval of departmental advisor and chair, a student may substitute experience in a seminar or topics course to meet this requirement if the substitute focuses on a Major Figure.

III. Linguistics and History of Literary Criticism (3 credits required)

One of the following

- ENGL.350 Comparative Grammar (3)
ENGL.351 Historical Linguistics (3)
ENGL.352 Structural Linguistics (3)
ENGL.353 History of American English (3)
ENGL.451 History of the English Language (3)
ENGL.452 Structure of the English Language (3)
ENGL.461 History of Literary Criticism (3)
ENGL.475 Topics in Linguistics (3)

IV. Writing (6 credits required)

One of the following

- ENGL.102 College Writing (3)
or
ENGL.190 Honors College Writing (3)

One of the following

- ENGL.313 Advanced Composition (3)
ENGL.315 Creativity and Style in Writing Non-Fiction (3)
ENGL.317 Writing for Business and Industry (3)
ENGL.318 Advanced Informational Writing (3)
WMST.333 Women's Words, Women's Lives (3)
WRIT.411 Organizational Communication (3)

Writing Track

The Writing Track requires a total of 42 credits completed with a grade of "C" or better. The course requirements for the Writing Track are identical to those for the Liberal Arts Track, with the exception that students in the Writing Track need not complete ENGL.360 Literary Research and Applied Criticism but must complete four upper division writing courses: one fulfilling GURs and from the following.

- ENGL.311 Writing Poetry (3)
ENGL.312 Writing Fiction (3)
ENGL.313 Advanced Composition (3)
ENGL.315 Creativity and Style in Writing Non-Fiction (3)
ENGL.317 Writing for Business and Industry (3)
ENGL.318 Advanced Informational Writing (3)
WMST.333 Women's Words, Women's Lives (3)
WRIT.411 Organizational Communication (3)
ENGL.417 Topics in Writing (3)
ENGL.465 British and American Prose (3)
ENGL.490 Directed Studies in English (when applicable) (3)

English Secondary Education Track

Students planning to teach English in middle schools, junior high schools, or senior high schools must complete both the core of courses in Secondary Education required for teacher certification (see the Department of Secondary Education) and 36 credits with a grade of "C" or better in the English Secondary Education Track.

Students are encouraged to plan a program that includes coursework in mythology, minority literature, linguistics, and American literature. One course in world literature is required. Completion of the intermediate level of a foreign language is strongly recommended. Also recommended are the following electives in education: SCED.458 Writing as a Learning Tool in Secondary Schools, SPCH.106 Voice and Diction, and SPPA.213 General Semantics.

English Secondary Education students must register with both the English Department and the Secondary Education Department. They will be assigned advisors by both departments.

Course requirements are listed below.

I. Literary Heritage (18 credits required)

A. Surveys of Development or Period

- ENGL.221 British Literature to 1798 (3)
ENGL.222 British Literature Since 1798 (3)

Note: English-Education students are urged to elect at least one additional lowerdivision survey in world, American, or minority literature.

Two of the following. One course from this group or from the Literary Genre group below must represent literature before 1798 (courses marked with an asterisk).

- ENGL.321 Medieval British Literature* (3)
ENGL.323 British Renaissance Literature* (3)
ENGL.324 British Literature of the Later Renaissance* (3)
ENGL.325 Eighteenth-Century British Literature* (3)
ENGL.326 Literature of the British Romantic Period (3)
ENGL.327 The Victorian Age (3)
ENGL.341 History and Literature of the Old Testament* (3)
ENGL.431 Literature of the American Romantic Period (3)
ENGL.432 Literature of the American Realistic Period (3)

B. Literary Genre

One of the following

- ENGL.322 British Medieval and Renaissance Drama* (3)

ENGL.331	American Drama (3)
ENGL.344	The Continental Novel (3)
ENGL.345	Perspectives in World Drama* (3)
ENGL.346	Modern Drama (3)
ENGL.420	Development of the British Novel: Eighteenth Century* (3)
ENGL.421	Development of the British Novel: Nineteenth Century (3)
ENGL.422	Development of the British Novel: Twentieth Century (3)
ENGL.423	Modern British Poetry (3)
ENGL.433	American Short Story (3)
ENGL.435	Development of the American Novel: Nineteenth Century (3)
ENGL.436	Development of the American Novel: Twentieth Century (3)
ENGL.437	American Poetry Through Frost (3)
ENGL.438	Modern American Poetry (3)

C. Thematic and Topical Course

EDUC.418	Adolescent Literature (3)
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II. Analysis and Research (9 credits required)

A. Formal Analysis of Genre

The following course, or score of 70+ on departmental exam measuring skills in analyzing elements of poetry.

ENGL.261	Elements of Poetry (3)
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B. Literary Analysis and Research

ENGL.361	Literary Research and Applied Criticism (3)
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C. Study of Major Figure and Related Scholarship

*One of the following**

ENGL.425	Chaucer (3)
ENGL.427	Shakespearean Comedy (3)
ENGL.428	Shakespearean Tragedy (3)
ENGL.429	Milton and The Humanist Tradition (3)

Note: With approval of departmental advisor and chair, a student may substitute experience in a seminar or topics course to meet this requirement if the substitute focuses on a Major Figure.

III. Language and Linguistics (3 credits required)

One of the following

ENGL.350	Comparative Grammar (3)
ENGL.353	History of American English (3)
ENGL.451	History of the English Language (3)
ENGL.452	Structure of the English Language (3)

Note: Students in English Education may also wish to complete ENGL.250, Applied Grammar.

IV. Writing (6 credits required)

One of the following

ENGL.102	College Writing (3)
or	
ENGL.190	Honors College Writing (3)

One of the following

ENGL.313	Advanced Composition (3)
ENGL.315	Creativity and Style in Writing Non-Fiction (3)
ENGL.317	Writing for Business and Industry (3)
ENGL.318	Advanced Informational Writing (3)

MINOR IN ENGLISH

Students minoring in English are required to complete 24 credits in English with a grade of "C" or better. In addition to College Writing, students must take six hours at the 200 level, six hours at the upper or lower levels, and nine hours at the upper level.

Students must work with departmental advisors to design programs which will be coherent and purposeful.

MINOR IN WORLD LITERATURE

Students minoring in World Literature are required to complete 24 credits with a grade of "C" or better. Required and elective courses are listed below.

Requirements for the Minor

Two of the following

ENGL.102	College Writing (3)
or	
ENGL.190	Honors College Writing (3)
ENGL.241	World Literature Through the Middle Ages (3)
or	
ENGL.242	World Literature From the Renaissance (3)

Two of the following

ENGL.341	History and Literature of the Old Testament (3)
ENGL.342	Folklore and Literature (3)
ENGL.343	Myth and Literature (3)
ENGL.344	The Continental Novel (3)
ENGL.345	Perspectives in World Drama (3)
ENGL.346	Modern Drama (3)
ENGL.347	World Literature Written in English
ENGL.441	Modern Fiction to World War II (3)
ENGL.442	Modern Fiction Since World War II (3)
ENGL.461	History of Literary Criticism (3)
ENGL.471	Topics in World Literature (3)

Lower-Division Electives

Select up to six hours of 100-200 level electives

ENGL.241	World Literature Through the Middle Ages (3)
or	
ENGL.242	World Literature From the Renaissance (3)
ENGL.243	Introduction to Classical Mythology (3)
ENGL.244	Introduction to Folklore (3)
ENGL.245	The Continental Short Story (3)
ENGL.246	The Continental Short Novel (3)
ENGL.270	Ideas in Literature (3)
HIST.101	Introduction to Ancient Civilization (3) ²
or	
HIST.241	History of European Civilization Through the Seventeenth Century (3)
or	
HIST.242	History of European Civilization from the Seventeenth Century (3)
xxxx.202	Foreign Language (fourth semester)

Upper-Division Electives

Select a minimum of six hours of 300-400 level electives³

ENGL.341	History and Literature of the Old Testament (3)
ENGL.342	Folklore and Literature (3)
ENGL.343	Myth and Literature (3)
ENGL.344	The Continental Novel (3)
ENGL.346	Modern Drama (3)
ENGL.347	World Literature Written in English
ENGL.441	Modern Fiction to World War II (3)
ENGL.442	Modern Fiction Since World War II (3)
ENGL.461	History of Literary Criticism (3)

¹ For those students desiring State of Maryland certification to teach English: Twenty-four hours of courses offered specifically by the English Department are required. In addition, several Maryland counties require work in Linguistics. It will be the responsibility of each student to determine his or her certification requirements.

² While only three hours in lower-division history may usually be offered to fulfill requirements for the Minor, other history courses may be approved by the Chair and/or advisor.

³ Up to twelve hours of upper-division English may be offered; up to six hours of upper-division non-English may be offered.

- ENGL.471 Topics in World Literature (3)
Foreign Language: any upper-division literature course(s)
History: any upper-division course(s) directly related to the student's major and approved for credit toward the Minor in World Literature by the World Literature and Linguistics Chair and/or advisor.
Philosophy, Art, etc.: any upper-division course(s) directly related to a student's major and approved for credit toward the Minor in World Literature and Linguistics Chair and/or advisor.

COURSE PREREQUISITES

Completion of ENGL.102 or ENGL.190 is prerequisite to enrollment in any other lower-division (100-200 level) English course. Completion of ENGL.102 or ENGL.190 and one additional lower-division English course is prerequisite to enrollment in any upper-division (300-400) level English course, including writing courses that fulfill the group IC, General University Requirement advanced writing course. Some upper-division courses have additional prerequisites, as noted in the course descriptions. The department strictly enforces pre-requisites.

MEETING GENERAL UNIVERSITY REQUIREMENTS/COMPETENCY

Every student in the university must complete ENGL.102 or ENGL.190 with a grade of "C" or better to complete Group IB of the General University Requirements.

The student may take two additional courses to fill Group III. All English courses *except the following* may be elected as a second course filling Group III: developmental courses—DVRD.100; DVRD.101; DVWR.101; DVWR.103; DVWR.104; DVWR.105 ; DVWR.106; DVWR.107 —; writing courses that can be used to fill Group I, C, the advanced writing course—ENGL.313 ; ENGL.315; ENGL.317; ENGL.318; 1594.411 —; and the following specific English courses—ENGL.102; ENGL.190; ENGL.485; ENGL. 486; ENGL.490; ENGL.497; ENGL.498; ENGL.499.

The student may select any of the following English courses as an advanced writing course, Group I C: ENGL.313; ENGL.315; ENGL.317; ENGL.318. Any student may, of course, take additional elective credits in English.

Some students will be required to complete special competency courses in language and writing in addition to meeting General University Requirements in English. Students for whom English is not a native language may be required to complete courses in English as a Second Language as a prerequisite to enrollment in ENGL.102, College Writing (see "Undergraduate Admissions," — International Students). Students whose entering scores indicate they need additional preparation to meet the standards of college-level expository writing will be required to complete DVWR.101, Preparation for College Writing, as prerequisite to enrollment in ENGL.102, College Writing. Students must earn a grade of "C" or better in the Developmental Writing course they are required to take before they are eligible to enroll in ENGL.102, College Writing.

TRANSFER CREDIT POLICY

The English Department freely accepts English credits from accredited colleges and universities. However, to meet General University Requirements, a student must either present three transfer credits in a college level composition course, with a grade of "C" or better, or earn a "C" or better in ENGL.102 at Towson State University. Students registering in the department's major and minor programs must complete a minimum of 12 credits in English Department offerings at Towson State University.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The English Department awards credit through the Advanced Placement Program of the university. Also, a selected number of entering freshmen are placed in ENGL.190 rather than in ENGL.102. The department offers credit for most courses, other than writing courses, through the Credit for Prior Learning program. Students applying for credit under this program complete an examination, an interview, and a paper in the area.

ENGLISH HONORS AND ACTIVITIES

The department participates in the Honors Program. A member of the Honors College, the English Department offers a number of intensive introductory seminars for qualified underclass students. It also sponsors departmental honors by which advanced students work individually with a professor in a tutorial setting before completing a thesis. Students interested in departmental honors should consult one of the English co-chairs no later than the first semester of their junior year. Honors are so designated on the graduate's transcript and diploma.

By a vote of the English faculty, the outstanding graduate in the department receives the Gerry Buettner Award at commencement.

Lambda Iota Tau is the national literary honor society with a chapter in the department, and the English Club is an informal association of majors, minors, and professors designed to foster a spirit of collegiality.

DUAL MAJOR PROGRAM

Students who major in one of the other programs of the university, yet retain a strong interest in language, literature, or writing are urged to explore with one of the English co-chairs the values of completing a dual major.

General/Liberal Studies

OFFICE

Linthicum Hall, Room 219J, (301) 321-2867

Coordinator: DR. GARY A. WOOD

THE PROGRAM

General Studies is designed to provide students with special interests or goals which are unattainable in a regular discipline with the opportunity to design their own major. Depending upon their goals, students may wish to combine courses from several traditional majors in a unique experimental program, such as, for example, "Nature Writing." Alternatively, the student might design the equivalent of a major available at a few colleges or universities but not at Towson at the present time, such as "Recreation Management."

For this reason, General Studies has no specific course requirements. Instead, the student must complete a minimum of 45 upper-division credits under the supervision of one or more faculty advisors with special expertise in the area of the student's interest. The opportunity for the student to achieve special goals under the close supervision of expert faculty is a distinctive feature of General Studies.

The General Studies program provides two broad approaches for students interested in planning their own majors. For students desiring preparation in certain areas already recognized as legiti-

mate disciplines but currently lacking sufficient student enrollment at Towson to justify the establishment of a regular department, programs have been created by interdisciplinary faculty committees under the Thematic Option alternative. Directed by a specific faculty coordinator, these programs at Towson currently include the following: African-American Studies, American Studies, Animal Behavior, Asian Studies, Comparative Ethnic Studies, Health Services Management, History of Art, Latin American Studies, Law Enforcement, Medieval and Renaissance Studies, Molecular Biology, Religious Studies, and Women's Studies.

When none of these programs, which are fully described below, meet the student's needs, then the student may follow the second approach, which is to design his or her own program under the supervision of the Coordinator of General Studies and any other faculty member or members with relevant expertise. Interested students should consult with the Coordinator of General Studies or with the coordinator of the relevant thematic area. All programs must be approved by the Coordinator of General Studies or one of the area coordinators. No unapproved program will qualify to meet graduation requirements.

INDIVIDUALLY-DESIGNED CORE THEMATIC OPTION

Core Major A—The Liberal Arts and Sciences Major

Core Major A is constructed around a "core" discipline in the traditional liberal arts and sciences fields. Students must meet the following requirements for this major.

1. The student must satisfy General University Requirements.
2. To declare the major, the student must be a sophomore or junior with a 2.00 GPA.
3. The student must take a minimum of 45 semester hours of upper-division course work in the liberal arts and sciences departments of art, biology, chemistry, dance, English, history, modern language, mathematics, music, philosophy, physics and theatre. These 45 hours must include work from a minimum of four different departments. Eighteen credits must be from the arts and 18 credits from the sciences (mathematics being considered a science).
4. At least 15, but no more than 21, of the 45 upper-division hours must come from one discipline which shall serve as the "core" discipline in the student program.

Core Major B—The General Arts & Sciences Major

Core Major B is constructed around a "core" discipline in General Studies, which incorporates all of the arts and sciences.

1. The student must satisfy General University Requirements.
2. From the arts and sciences, which are construed to be the following—art, biology, chemistry, dance, economics, English, geography, history, modern languages, mathematics, music, philosophy, physics, political science, psychology, sociology, speech and theatre—the student must take a minimum of 45 semester hours of upper-division course work. With the approval of the student's advisor and the appropriate dean, courses in departments not listed above may be allowed if these courses are needed to complement the student's program.
3. At least 15, but no more than 21, of the 45 upper-division hours must come from one discipline which shall serve as the "core" discipline in the student's program.

Thematic Options

A student may fulfill the requirements for either Major A or Major B by substituting a thematic plan for the "core" discipline. The thematic plan must be approved by the student's advisor and the appropriate dean. By following this plan the student could develop

an academic concentration in areas such as urban studies, American studies, environmental issues, etc.

Except for the following, the requirements will be the same as for Major A or B:

1. A minimum of 18, but not more than 36, of the 45 upper division hours must relate specifically to a chosen topic or theme.
2. All course work must be on an upper-division level unless the faculty advisor approves the inclusion of some particularly significant course work at the lower-division level. For example, a course important to the student's theme may exist only at the lower-division level.

FORMALLY-DESIGNED THEMATIC OPTIONS

The following formally-designed thematic options are available. Requirements for each theme are listed below.

African-American Studies
American Studies
Animal Behavior
Asian Studies
Comparative Ethnic Studies
Health Services Management
History of Art
Latin American Studies
Law Enforcement
Medieval and Renaissance Studies
Molecular Biology
Religious Studies
Women's Studies

AFRICAN-AMERICAN STUDIES

Advisory Committee: GISENDANNER (*English, Coordinator*); MURUNGI, (*Philosophy*); LINDNER, (*Education*) JOHNSON (*History*); CLAY (*Minority Affairs*); WOODSON (*English*); GREENE (*English*)

The Program

The African-American Studies program offers the student the opportunity to study in-depth the historical and cultural existence of the Afro-American by examining his unacknowledged roles in American society, and the presence and importance of the Black aesthetic culturally, socially, politically, and economically. An interdisciplinary program concentrating mainly in the humanities, the curriculum of the African-American Studies program is subject to review and flexibility, as courses may be added or subtracted with the permission of the Advisory Committee.

Students may choose a concentration in the program, select courses to structure a concentration within the General Studies Program, or simply take courses as electives.

New courses, special topics, and minimester courses may be accepted toward the major with approval of the committee.

For further information, please contact one of the advisors.

Requirements for the Major

- A. The student must satisfy requirements with the following courses, either recommended or required:

ENGL.232	American Literature Since 1865 (recommended) (3)
HIST.146	U.S. History Since Mid-19th Century (required) (3)
SOCI.101	Introduction to Sociology (required) (3)

- B. To declare the concentration the student must be at least a sophomore with a 2.00 GPA.

- C. The student must take a minimum of 45 semester hours of

upper-division work from the Arts and Sciences: art, biology, chemistry, economics, geo-graphy, history, modern mathematics, music, philosophy, physics, political science, psychology, sociology, speech and drama.

D. Students must complete 15 hours from the following.

ENGL.233	Survey of Afro-American Literature (3)
ENGL.234	Major Writers in Afro-American Literature(3)
ENGL.271	Women in Ethnic Literature (3)
xxxx.xxx	Select Indian, African and Caribbean Novels (3)
ENGL.347	World Literature Written in English
HIST.123	History of the Caribbean and Central America
HIST.133	History of Africa: Earliest Times to the Nineteenth Century (3)
HIST.134	History of Africa: Nineteenth Century to the Present (3)
HIST.145	History of U.S. to Mid-19th Century
HIST.146	History of U.S. Since Mid-19th Century
HIST.381	History of Afro-Americans (3)
HIST.492	Historical Themes: Minority Women in the U.S.

E. Students must complete 15 hours from the following courses.

One of the following

POSC.341	African Government & Politics (3)
POSC.435	Africa in World Politics (3)
GEOG.431	The Geography of Africa (3)

Two of the following

BLST.401	Afro-American Perspectives (3)
ENGL.477	The Literature of Black America (3)
HIST.281	Topics in History: Women, Laborers and Slaves in Early America (3)
SOCI.341	Class, Status and Power (3)
SOCI.381	Minority Groups (3)
SOCI.470	Special Topics in Soci: Black-White Relations (3)
SOCI.472	Special Topics in Soci: Blacks in America: Myths and Realities (3)

Two of the following

ART.209	Black Art History (3)
BLST.401	Afro-American Perspectives (3)
ECON.351	Urban Economics (3)
GENL.241	The Ethnic Experience in America (3)
HIST.375	The City in American History (3)
PHIL.251	Contemporary African-American Thought (3)
PHIL.270-279	Philosophical Perspectives (3)
POSC.305	Urban Government (3)
POSC.341	African Government and Politics (3)
POSC.435	Africa in World Politics (3)
SOCI.327	Urban Sociology (3)
SOCI.341	Class, Status, and Power (3)
SOCI.343	Minority Groups (3)
SOCI.470-479	Special Topics in Sociology (3) (Black-White Relations—when offered)

AMERICAN STUDIES

Advisory Committee: DOUGLAS, (*English, Coordinator*); FISHER, (*Anthropology*); ESSLINGER, (*History*); FRIEDMAN, (*English*); HEDGES, (*English*); MARTIN, (*History*); RIVERS, (*History*); WOOD, (*English*)

OFFICE

Linthicum Hall, Room 218G, (301) 321-2943

The Program

The American Studies concentration is an interdisciplinary program that allows a student to take courses in different academic

departments while still focusing on the concept of American culture. The American Studies approach stresses the interrelatedness of history, literature, the fine and vernacular arts, popular culture, technology and folkways. Students examine American institutions, ideas, and material forms in order to better understand their past and shape their future.

The major is designed for those students who may wish to have careers in fields such as teaching, museum work, law, journalism, and the like where a broad knowledge of American history and culture is desirable.

Those students interested in material culture or museum work have the opportunity to receive credit for internships at a number of local museums or historical sites.

Requirements for the Major

I. Lower-division requirements: 18 credits from the following list.

AMST.201	Introduction to American Studies (3)
ANTH.209	Anthropology of American Culture (3)
ENGL.231	American Literature to 1865 (3)
ENGL.232	American Literature Since 1865 (3)
ENGL.233	Survey of Afro-American Literature (3)
ENGL.235	Ethnic American Literature (3)
GEOG.109	Introduction to Human Geography (3)
HIST.145	History of U.S. to Mid 19th-Century (3)
HIST.146	History of U.S. Since Mid-19th Century (3)
HIST.147	History of Women in America (3)
POSC.103	American National Government (3)

II. Upper-division requirements: 30 credits from the following list.* No more than 12 credits in any department.

Anthropology

ANTH.365	North American Indians (3)
ANTH.383	North American Archeology (3)
ANTH.385	Archeology of the American Southwest (3)

American Studies

AMST.370	Topics in American Studies (3)
AMST.491	Directed Readings in American Studies (3)
AMST.497	Practicum in Material Culture (3)

Art

ART.322	American Art (3)
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English

ENGL.331	American Drama (3)
ENGL.353	History of American English (3)
ENGL.431	Literature of the American Romantic Period (3)
ENGL.432	Literature of the American Realistic Period (3)
ENGL.433	American Short Story (3)
ENGL.435	Development of the American Novel: 19th Century (3)
ENGL.436	Development of the American Novel: 20th Century (3)
ENGL.437	American Poetry Through Frost (3)
ENGL.438	Modern American Poetry (3)
ENGL.447	Afro-American Women Writers (3)
ENGL.473	Topics in American Literature (3)

Geography

GEOG.420	Geography of Anglo-America (3)
GEOG.423	Maryland and the Mid-Atlantic Region (3)

History

HIST.331	American Military History Since 1865 (3)
HIST.345	The American Colonies (3)
HIST.346	American Revolutionary Period (3)
HIST.347	American Early National Period (3)
HIST.348	American Jacksonian Period
HIST.349	Civil War (3)

HIST.350	Era of Reconstruction (3)
HIST.351	Age of Enterprise (3)
HIST.352	Age of Reform (3)
HIST.359	The FDR Era (3)
HIST.360	Recent American History (3)
HIST.361	American Intellectual and Religious History (3)
HIST.363	Social History of U.S. to 1865 (3)
HIST.364	History Since 1865 (3)
HIST.366	History of American Business (3)
HIST.367	Constitutional History to 1868 (3)
HIST.368	Constitutional History Since 1868 (3)
HIST.369	Diplomatic History of U.S. to 1900 (3)
HIST.370	Diplomatic History of U.S. Since 1900 (3)
HIST.373	Early American Frontier (3)
HIST.374	Far Western Frontier (3)
HIST.375	City in American History (3)
HIST.377	Immigrant in American History (3)
HIST.379	History of Native Americans: The East (3)
HIST.380	History of Native Americans: The West (3)
HIST.381	History of Afro-Americans (3)
HIST.385	American Labor (3)
HIST.397	History of Maryland from Colonial Times to Present (3)
HIST.398	History of Baltimore (3)

Political Science

POSC.305	Urban Government and Politics (3)
POSC.381	The Presidency (3)
POSC.383	Congress (3)
POSC.417	American Political Parties (3)
POSC.418	Constitutional Law (3)
POSC.432	US-Soviet Relations (3)
POSC.439	US Foreign Policy in South East Asia (3)
POSC.441	Contemporary US-Western European Relations (3)
POSC.445	US Foreign Policy in South Asia (3)
POSC.491	Seminar in Contemporary US Foreign Policy (3)

Philosophy

PHIL.329	American Philosophy (3)
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Sociology

SOCI.329	Demography (3)
SOCI.356	Corrections in America (3)

Women's Studies

WMST.337	Feminism
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III. 15 additional upper-division credits from any arts and sciences disciplines are needed to fulfill the General Studies requirement of 45 upperdivision credits.

*Other courses relating to American culture may be taken with the approval of the coordinator.

ANIMAL BEHAVIOR

Advisory Committee: CREIGHTON (*Biology, Coordinator*); FIGLER (*Psychology, Coordinator*); FORESTER, (*Biology*); EWIG, (*Biology*); ROBINSON, (*Biology*); SCARBROUGH, (*Biology*); SCULLY, (*Biology*); JOHNSON, (*Psychology*); KRUGGEL, (*Psychology*); PETRI, (*Psychology*); CARET (*Chemistry*); RABIN, (*Psychology*)

The Program

The study of animal behavior has received an increasing amount of attention from the public due to the number of zoological parks and aquaria across the country, as well as presentations in the media concerning animal behavior and the developing field of sociobiology. The thematic option in Animal Behavior is designed to offer a concentrated education in this multifaceted discipline.

The program is administered by the Institute of Animal Behavior, which includes faculty from the departments of Biological Sciences, Psychology and Chemistry at Towson State University, and adjunct faculty from other institutions. Students who complete this program may be qualified for staff positions at aquaria, nature centers, zoological parks, or to pursue careers in freelance writing about animal behavior. Students who are considering post-baccalaureate studies in disciplines such as ethology, comparative psychology, behavioral biology, etc., should discuss this option with their advisor early in the program, since most graduate programs will require additional courses in Biology, Psychology, and ancillary subjects.

Requirements for the Major

Required Courses (24-25 credits)

BIOL.110	Contemporary General Biology (4)
PSYC.101	General Psychology (3)
PSYC.111	Behavioral Statistics (4)
BIOL.371	Animal Behavior (4)
PSYC.460	Ethology and Comparative Psychology (3)
PSYC.261	Experimental Psychology (4)
	or
BIOL.381	Biological Literature (3)
BIOL.413	Evolution (3)
PSYC.470	Special Topics in Psychology (3)
	or
BIOL.491	Independent Research in Biology (3)

Biology Electives

*Two courses from the following**

BIOL.351	Field and Systematic Vertebrate Zoology (4)
BIOL.353	Invertebrate Zoology (4)
BIOL.367	General Endocrinology (3)
BIOL.402	General Ecology (4)
BIOL.456	Ornithology (4)
BIOL.458	Mammalogy (4)
BIOL.461	Entomology (4)
BIOL.465	Mammalian Physiology (4)
BIOL.467	Herpetology (4)
BIOL.469	Comparative Physiology (4)

Psychology Electives

*Two courses from the following**

PSYC.305	Psychology of Learning (3)
PSYC.309	Behavioral Pharmacology (3)
PSYC.315	Motivation (3)
PSYC.317	Sensation and Perception (3)
PSYC.462	Laboratory in Ethology and Comparative Psychology (2)
PSYC.465	Physiological Psychology (3)
PSYC.466	Laboratory in Physiological Psychology (2)
PSYC.485	Experimental Design (4)

*Students should consult this *Catalog* for course prerequisites, and discuss all course selections with their advisors.

ASIAN STUDIES

Advisory Committee: DA SILVA, (*Geography and Environmental Planning*); HIRSCHMANN, (*History*); KEALEY, (*Philosophy*); LEE, (*Art*); McWILLIAMS, (*History, Coordinator*); MERANI, (*Political Science*)

The Program

The Asian Studies major within the General Studies program is designed to offer students an interdisciplinary program of study of various dimensions of the Asian world. The student may plan

a course of study that concentrates on a particular aspect of Asian civilization or on a particular sub-region of Asia. One might, for example, focus on the art and philosophy of various Asian peoples, or instead, one might choose to concentrate on Chinese (or Indian or Japanese) civilization studying both the traditional and modern society, its physical setting, its political and economic development, etc. In order to build a sound program of study, which meets both the individual student's needs and the General Studies requirements, it is essential that the student work closely with his advisor semester by semester in planning his program and selecting courses.

A second option open to students interested in specializing in Asian Studies is the International Studies major with an area specialization (Plan A).

Requirements for the Major

1. Six credit hours of a foreign language appropriate to the student's designated area of interest in Asia. In special cases this requirement may be waived, but only with the written permission of the advisory committee. The Asian language courses presently offered at Towson are listed below.
2. A minimum of 30 credit hours selected from the following list of courses, but with courses from at least three departments (excluding language) represented. The lower-division courses marked by asterisks will be accepted as upper-division courses for the purpose of meeting this requirement. Other courses not shown on the list, but which are relevant to Asia (such as directed readings courses and minimester courses), may be accepted with the approval of the advisory committee.

Approved Courses

Art

- ART.302 The Art of China (3)*
ART.303 The Art of Japan (3)*

Geography

- GEOG.443 Geography of East Asia (3)
GEOG.445 Geography of South And Southeast Asia (3)
GEOG.447 Economic and Political Geography of the Middle East (3)
GEOG.485 Seminar: South Asia (3)

History

- HIST.107 Introduction to History of Islamic Civilization (3)*
HIST.109 Introduction to the Civilization of India (3)
HIST.116 Introduction to Chinese Civilization (3)
HIST.117 Introduction to Japanese Civilization (3)
HIST.311 Traditional India: Its Historical Development (3)
HIST.312 History of Modern India (3)
HIST.313 History of Modern Southeast Asia (3)
HIST.316 Revolutionary China (3)
HIST.317 The Rise of Modern Japan (3)

Language

- CHNS.101-102 Elementary Modern Chinese I, II (3, 3)
CHNS.201-202 Chinese Intermediate I, II (3,3)
JPNS.101-102 Japanese Elements I, II (3,3)
JPNS.201-202 Japanese Intermediate I, II (3,3)

Philosophy-Religion

- PHIL.301 Philosophies of India (3)
PHIL.302 Philosophies of China And Japan (3)
PHIL.457 Comparative Religion (3)

Political Science

- POSC.338 Comparative Government: Russia and the East (3)
POSC.439 U.S. Foreign Policy in Southeast Asia (3)
POSC.445 U.S. Foreign Policy in South Asia (3)

Sociology-Anthropology

- ANTH.367 Peoples of The Middle East (3)

COMPARATIVE ETHNIC STUDIES

Advisory Committee: NICHOLAS, (Education); ROTHSTEIN, (Anthropology); SCHEPER, (Sociology); AVERY, (English, Coordinator); GISSENDANNER, (English); LEONS, (Anthropology); RIES, (Communication Sciences and Disorders); Da SILVA, (Geography)

The Program

The Comparative Ethnic Studies concentration is an essential part of Towson State University's attempt to provide a sound liberal arts and science education to all of its students. It further reflects the goals of the university in providing students with some experience in interdisciplinary courses at upper- and/or lower-division levels. While the Comparative Ethnic Studies program allows students to take courses in several different and distinct academic disciplines, the program stresses the importance of a comparative framework and the value of interdisciplinary approaches to the American ethnic experience.

A secondary goal of the program is to provide information to the ethnic groups in the Baltimore metropolitan area, largely through the publication of a periodic newsletter, *Kaleidoscope*.

The program is designed for two particular groups of students:

1. Students desiring careers in teaching, personnel, human services, social work, criminal justice, law and other professions, for which the Comparative Ethnic Studies major can provide valuable information and insights.
2. Those students who, no matter what their major or career goals, simply wish to have a broader and deeper understanding of the variety of peoples who comprise modern American society.

Requirements for the Major

Required Courses (9 credits)

- ENGL.235 Ethnic-American Literature (3)
GENL.241 The Ethnic Experience in America (3)
HIST.377 The Immigrant in American History (3)

Electives

Students must select 15 hours from the upper-division courses. No more than two courses may be at the 200 level.

- ANTH.365 North American Indians (3)
ANTH.388 Peasant Cultures (3)
ECED.425 The Young Black Child in a Multi-Cultural Setting (3)
ECON.333 Economics of Poverty and Discrimination (3)
ECON.351 Urban Economics (3)
EDUC.460 Teaching in a Multi-Cultural/Multi-Ethnic Society (3)
ENGL.233 Survey of Afro-American Literature (3)
ENGL.234 Major Writers in Afro-American Literature (3)
ENGL.476 Topics in Multi-Ethnic Literature (3)8
ENGL.477 Topics in Black American Literature (3)
GEOG.385 Population and Settlement (3)
HIST.277 A Survey of Jewish History (3)
HIST.375 The City in American History (3)
HIST.379 Indian-White Relations in American History: The East (3)
HIST.380 Indian-White Relations in American History: The West (3)
HIST.381 History of Afro-Americans (3)
POSC.305 Urban Government and Politics (3)
SOCI.241 Blacks in America: Myths and Reality (3)
SOCI.343 Minority Groups (3)
SOCI.370-79 Topics in Sociology (3)
SPPA.481 (The American Jewish Community—when offered) (3)
Dialects of Ethnic Groups (3)

Up to seven credits of related language courses at an appropriate level may be applied to the major with the approval of the committee.

*Topics in Multi-Ethnic Literature may be taken only once for credit within 18 hours. However, with permission, it may be taken for major credit twice within 27 hours.

Recommended Courses

ANTH.207	Cultural Anthropology (3)
ENGL.232	American Literature Since 1865 (3)
HIST.145	History of U.S. to Mid-Nineteenth Century (3)
HIST.146	History of U.S. Since Mid-Nineteenth Century (3)
HIST.363	Social History of U.S. to 1865 (3)
HIST.364	Social History of U.S. Since 1865 (3)
SOCI.101	Introduction to Sociology (3)
SOCI.329	Demography (3)
SOCI.341	Class, Status and Power (3)

Kaleidoscope

First published in 1974, *Kaleidoscope* is a creation of the Towson State University Comparative Ethnic Studies program. This ethnic studies newsletter serves both Towson State University and metropolitan Baltimore, by encouraging ethnic activities, projects, and scholarship on and off the campus.

Issued semi-annually, 2,000 copies of the newsletter are distributed to teachers and administrators in Baltimore City and County Public Schools, to area colleges, to Towson State faculty and students, to members of Baltimore's ethnic communities and to city and county officials. Copies are also sent to readers around the country and the newsletter's subscription list continues to grow.

Kaleidoscope's content reflects the interests and diversity of its audience. Ethnic book and film reviews have often appeared. Profiles of ethnic individuals and communities, articles about ethnic programs and conferences, news of upcoming community events are regularly featured. Material is submitted by Towson faculty and students, by educators at other institutions, by ethnic organizations, and by interested individuals.

HEALTH SERVICES MANAGEMENT

NEIL GALLAGHER, (*Health Science, Coordinator*)

The Program

The Health Services Management program is designed to provide students with a basic overview of the business and health disciplines. Students are prepared to assume management careers in health-related fields, i.e. administrative assistants, health planners or midmanagement personnel. It is highly recommended that students selecting this program should consider the possibility of having a dual major—Business Administration or Health Sciences. Depending on the student's interests and the availability of positions, graduate training in health administration may be desirable after completing this program.

Requirements for the Major

The Health Services Management program is a thematic option in which the student has an academic concentration in business and health sciences. Except for the following, the requirements for the program are the same as for the General/Liberal Studies option:

1. A minimum of 18, but not more than 36, of the 45 upper division hours must relate specifically to a chosen topic or theme.
2. All coursework must be on an upper-division level unless the faculty advisor approves the inclusion of some particularly significant coursework at the lower-division level. For example, a course important to the student's theme may exist only at the lower-division level, i.e., HLTH 202 and 207.

TRANSFER STUDENT POLICY

A minimum of 30 hours must be completed at Towson State University.

A limited number of fieldwork experiences are available. For further information, please see the chair of the Health Science Department.

Required Prerequisites (25 credits)

ACCT.201	Accounting Principles, I (3)
ACCT.202	Accounting Principles II (3)
ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
HLTH.101	Current Health Problems (3)
MATH.237	Elementary Biostatistics (3)
SOCI.101	Introduction to Sociology (3)

Required Courses

Health Science (12 credits)

HLTH.202	Principles & Practices in Community Health (3)
HLTH.207	Health Care in the United States (3)
HLTH.311	Chronic & Communicable Disease (3)
HLTH.xxx	Upper Division Health elective (3)

Health Services Management Core (12 credits)

ACCT.225	Business Law I (3)
FIN.331	Financial Management (3)
HRM.381	Human Resource Administration (3)
MKTG.xxx	Upper-Division Marketing elective (3)

Interdepartmental Courses (15-16 credits)

COSC.165	Fundamentals of Computing (3)
ECON.339	Economics of Health (3)
ENGL.317	Writing for Business and Industry (3)
SOCI.xxx	Upper Division Sociology Elective (3)
_____	Laboratory Science elective (3,4)

Students must also complete 12 credits of upper division electives (300-400 level).

HISTORY OF ART

FREDERICK LADD, (*Art, Coordinator*)

The Program

The History of Art concentration, within the Liberal Arts major, is a program which offers undergraduates the opportunity to explore the discipline of art history in considerable depth. This investigation, performed well, leads to an understanding of the structure and function of the discipline. Also, it prepares the student for graduate work and offers an excellent background for many types of careers related to the study of the history of art.

Honors Program

Students may elect to take the honors program in the History of Art. Eligibility requirements governing the college honors program are described in this *Catalog*.

Requirements for the Major

To complete the thematic option in the History of Art, the student must take a total of 45 upper-division credits. Of the 45 upper-division credits, a minimum of 27 credits, but not more than 36, must be taken in art history. If the student chooses to take the minimum 27 credits, the difference between the 27 minimum and the 36 maximum may be taken in allied disciplines, such as English, History, and Philosophy, in a related historical period, subject

to the approval of the faculty advisor. The remaining credits to reach the 45 upper-division total are electives, but they may also be taken in disciplines related to the student's interest in art history.

Required Courses (6 credits)

- ART.391 Research in Art History (3)
ART.485 Seminar in Art History (3) (repeatable).

Language Requirement

Two years of either French or German or their equivalent by examination is strongly recommended, but is not required.

History of Art Courses

- ART.221 Prehistoric to Medieval Arts (3)
ART.222 Renaissance to Contemporary Art (3)
ART.302 The Art of China (3)
ART.303 The Art of Japan (3)
ART.305 Architectural Concepts (3)
ART.316 Women in Art (3)
ART.391 Research in Art History (3)
ART.423 Picasso to the Present (3)
ART.424 Henry Moore to the Present (3)
ART.425 Frank Lloyd Wright to the Present (3)
ART.444 Byzantine to Gothic Art (3)
ART.445 Italian Renaissance Art (3)
ART.471 Art & Architecture of Ancient Greece (3)
ART.472 Art & Architecture of the Roman Empire (3)
ART.479 Baroque Art & Architecture (3)
ART.480 Eighteenth Century Art & Architecture (3)
ART.485 Seminar in Art History (repeatable) (3)

LATIN AMERICAN STUDIES

Advisory Committee, LEONS (*Anthropology, Coordinator*); GIRO (*Modern Languages*); DENT (*Political Science*); HADDOCK (*Geography*)

The Program

The Latin American Studies concentration within the General Studies major allows the student to approach the study of Latin America as an area from an interdisciplinary perspective. It would be an appropriate concentration for those intending to pursue Latin American Studies or Spanish on the graduate level, for those anticipating living or working in Latin America, or for those wishing to acquire expertise in Latin America for a career in business or government.

The Latin American Studies program is administered by the Latin American Studies committee. The student should select one of the members of the committee as an advisor.

Requirements for the Major

1. Spanish Composition and Conversation (SPAN.301) or its equivalent.
2. Thirty credits chosen from the following Latin American related courses. The courses must be selected from at least four of the five departments represented. (The student is reminded that a total of 45 upper-division hours are required for the completion of a General Studies major.)

Approved Courses

Spanish

- SPAN.302 Composition & Conversation II (3)
SPAN.312 Culture & Civilization of the Spanish-Speaking Peoples II (3)

- SPAN.419 Literature of the Cuban Revolution (3)
SPAN.437 Romanticism in Spanish American Literature (3)
SPAN.439 Literary Movements in Spanish American Literature (3)
SPAN.444 Twentieth Century Spanish American Literature (3)
SPAN.470 Special Topics (when concerned with Latin America) (3)
SPAN.491 Directed Readings in Spanish Literature (when concerned with Spanish-American topics) (1-3)
SPAN.492 Directed Readings in Spanish Literature (when concerned with Spanish-American topics) (1-3)

Anthropology

- ANTH.366 South American Indians (3)
ANTH.369 Tradition and Revolution in Latin American Society (3)
ANTH.495 Independent Research (3)

Political Science

- POSC.001 Model Organization of American States (3)
POSC.351 Government & Politics of Latin America (3)
POSC.355 Latin American Policy of the U.S. (3)
POSC.437 Castro and the Cuban Revolution (3)
POSC.490 Independent Study (3)

Geography

- GEOG.461 Geography of Latin America (3)
GEOG.495 Directed Readings in Geography (3)

History

- HIST.121 Latin America: Colonial Period (3)
HIST.122 Latin America: National Period (3)
HIST.123 History of Central America and the Caribbean
HIST.323 The Social History of Latin America (3)

LAW ENFORCEMENT

Advisory Committee: TOLAND (*Sociology, Coordinator*); ESSLINGER, (*History*); GROSSMAN (*Political Science*); JOSSELSO (*Psychology*)

The Program

The Police Foundation defines law enforcement as "the job of defining that delicate balance between liberty and order, of applying wisdom, of being flexible, of using discretion and, most particularly, of seeing the mundane and trivial in a broader legal and moral context." The most effective way of preparing one to meet this assignment is through a broad liberal arts education. The emphasis on education rather than training is based on the knowledge that training is acquired in police academies and in-service programs. Community colleges also offer vocationally-oriented courses, and students who wish to obtain this background should attend a community college before coming to Towson State. Community college transfer students are advised to complete the required introductory courses in sociology, psychology, political science, history and health. Law enforcement courses taken at a community college (e.g., criminal investigation) will usually transfer as general electives.

Requirements for the Major

A total of 45 upper-division credit hours are required to complete the general studies major. The law enforcement curriculum consists of 36 credit hours of required upper-division courses, nine credit hours of upper-division electives, and the general university requirements.

Required Courses

Sociology

Nine credits (beyond Introduction to Sociology, SOCI.101) including:
 SOCI.353 Criminology (3)
 SOCI.355 Juvenile Delinquency (3) and one of the following:
 SOCI.343 Minority Groups (3)
 SOCI.351 Social Deviance (3)
 WRIT.354 Introduction to Criminal Justice (3)
 SOCI.356 Corrections in America (3)
 SOCI.491 Practicum in Sociology (3)

Psychology

Nine credits (beyond General Psychology, PSYC.101) chosen from the following:
 PSYC.203 Human Development (3)
 PSYC.325 Social Psychology (3)
 PSYC.350 Personality (3)
 PSYC.361 Abnormal Psychology (3)
 PSYC.404 Adolescent Psychology (3)

History

Six credits (beyond History of the U.S. to the Mid-19th Century, HIST.145; and History of the U.S. Since the Mid-19th Century, HIST.146) chosen from the following:
 HIST.363 Social History of the U.S. to 1865 (3)
 HIST.364 Social History of the U.S. Since 1865 (3)
 HIST.367 The Development of the U.S. Constitution (3)
 HIST.368 The U.S. Constitution and Civil Liberties (3)
 HIST.375 The City in American History (3)
 HIST.377 The Immigrant in American History (3)
 HIST.381 History of Afro-Americans (3)

Political Science

Six credits (beyond American National Government, POSC.103) chosen from the following:
 POSC.305 Urban Government and Politics (3)
 POSC.375 Public Administration (3)
 POSC.401 Introduction to Law (3)
 POSC.418 Constitutional Law (3)

Health

Six credits (beyond Current Health Problems, HLTH.101)
 HLTH.221 Human Sexuality (3)
 HLTH.405 Drugs in Our Culture (3)

*Students are advised to take this course to fulfill Group I-C Advanced Writing Requirement.

MEDIEVAL AND RENAISSANCE STUDIES

Advisory Committee: DEBRABANDER (*Philosophy*); JOCHENS (*History, Coordinator*); LADD (*Art*); McLUCAS (*Modern Language*); MRUCK (*History*)

The Program

By electing the concentration in Medieval and Renaissance Studies, majors in the General Arts and Sciences receive the opportunity for comprehensive interdisciplinary study of the Medieval and Renaissance period. A degree in Medieval and Renaissance Studies can lead to fulfilling careers in such areas as teaching, museum work, archival research, and freelance writing, as well as to interdisciplinary graduate studies in the Middle Ages and the Renaissance. As a second major, this concentration provides a special perspective on almost any other field of study. Students in this field can have unique opportunities to study the Medieval and Renaissance collections at Baltimore's Walters Art Gallery, Washington's Folger Library, the National Gallery of Art, and Dumbarton Oaks.

Honors Program

Students interested in earning honors in Medieval and Renaissance Studies should see their advisor in the program.

Requirements for the Major

Students with this thematic option will earn the Bachelor of Arts degree. Like all general arts and sciences majors, students choosing this concentration must take at least 45 semester hours of upper-division course work from the Departments of Arts and Sciences. Of these, at least 36 hours shall consist of course work in subjects related to the Middle Ages and the Renaissance.

Eighteen of the 36 hours shall be distributed as follows: six hours in English; six hours in history; and six hours from two of the following departments, Art, Modern Languages, and Philosophy.

The remaining 18 hours may be distributed according to the student's choice, except that no more than 21 hours may come from a single department.

Directed readings, research methods, independent study, honors thesis or minimester courses in Medieval and Renaissance topics, when approved by the Medieval and Renaissance Studies Committee, may be undertaken within the requirements of the departments that offer them and with the approval of the teaching faculty member. Instruction in Latin is available through the Department of Modern Languages at the elementary and intermediate level.

Approved Courses

The upper-division courses listed below are applicable to the Medieval and Renaissance Studies concentration.

An asterisk marks those courses whose subject matter changes from semester to semester and which hence are not always applicable to the Medieval and Renaissance Studies concentration. Before pre-registration, the committee will make available a list showing which asterisked courses are available to Medieval and Renaissance Studies for that semester. The subject matter of some of these courses can be arranged according to students' individual interest. Students wishing to use such courses towards their Medieval and Renaissance Studies concentration should consult with their advisors in the program and with the course instructor during the semester before they intend to take the course.

Art

ART.444 Byzantine to Gothic Art (3)
 ART.445 Italian Renaissance Art: 15th-16th Centuries (3)
 ART.485 *Seminar in Art History (3)

English

ENGL.321 Medieval British Literature (3)
 ENGL.322 British Medieval and Renaissance Drama (3)
 ENGL.323 British Renaissance Literature (3)
 ENGL.324 British Literature of the Later Renaissance (3)
 ENGL.425 Chaucer (3)
 ENGL.427 Shakespearean Comedy (3)
 ENGL.428 Shakespearean Tragedy (3)
 ENGL.429 Milton and the Humanist Tradition (3)
 ENGL.451 History of the English Language (3)
 ENGL.471 *Topics in World Literature (3)
 ENGL.472 *Topics in British Literature (3)
 ENGL.485 *Seminar in English Studies I (3)
 ENGL.486 *Seminar in English Studies II (3)
 ENGL.490 *Directed Studies in English (2-4)
 ENGL.494 *Travel and Study (3-6)

Geography

GEOG.451 Geography of Europe (3)

History

- HIST.303 Hellenistic Civilization (3)
 HIST.304 Ancient Greek Civilization (3)
 HIST.305 Roman Civilization (3)
 HIST.401 The Early Middle Ages: 300-1050 (3)
 HIST.402 The High Middle Ages: 1050-1350 (3)
 HIST.403 The Renaissance Era: 1300-1500 (3)
 HIST.404 The Reformation: 1500-1648 (3)
 HIST.417 Economic History of Europe to the Mid-Eighteenth Century (3)
 HIST.483 *Directed Individual Research (2-4)
 HIST.485 History Seminar (3)
 HIST.491 *Biographical Studies in History (3)
 HIST.492 *Historical Themes (3)
 HIST.494 *Travel and Study (3-6)
 HIST.496 *Colloquium (3)
 HIST.497 *Directed Reading (2-4)
 HIST.499 *Senior Thesis (4-8)

Modern Languages

- FREN.321 Survey of French Literature I (3)
 FREN.470 *Special Topics in French (3)
 FREN.491 *Directed Readings in French Literature (1-3)
 GERM.321 Survey of German Literature I (3)
 GERM.491, *Directed Readings in German (1-3)
 492 (1-3)
 ITAL.321 Survey of Italian Literature I (3)
 SPAN.321 Survey of Spanish Literature I (3)
 SPAN.491, *Directed Reading in Spanish Literature (1-3)
 492 (1-3)

Music

- MUSC.301 History of Music I (3)
 MUSC.401 Music Prior to 1600 (3)

Philosophy

- PHIL.322 Late Classical and Medieval Philosophy (3)
 PHIL.323 Late Medieval and Renaissance Philosophy (3)
 PHIL.440- *Philosophical Systems (3)
 449
 PHIL.470- *Philosophical Problems (3)
 479
 PHIL.495 *Research Tutorial in Philosophy (3)

Recommended Courses

This list contains lower-division courses whose content is largely in the Medieval and Renaissance areas or their backgrounds; and lower- and upper-division courses whose methodologies are valuable to students of the Middle Ages or the Renaissance. The upper-division courses can be counted toward the student's 45 semester hours in the General Arts and Sciences.

Art

- ART.105 Art in the Culture (3)
 ART.221 Prehistoric to Medieval Art (3)
 ART.222 Renaissance to Contemporary Art (3)

English

- ENGL.221 British Literature to 1798 (3)
 ENGL.241 World Literature Through the Middle Ages (3)
 ENGL.243 Introduction to Classical Mythology (3)
 ENGL.341 History and Literature of the Old Testament (3)
 ENGL.342 Folklore and Literature (3)
 ENGL.343 Myth and Literature (3)

History

- HIST.101 Introduction to Ancient Civilization (3)
 HIST.201 Survey of English History to 1783 (3)
 HIST.211 Christianity from Jesus to Luther (3)
 HIST.241 History of European Civilization through the Seventeenth Century (3)
 HIST.245 History of European Woman
 HIST.275 History of Ancient Israel (3)

Philosophy

- PHIL.221 Ancient Greek Philosophy (3)
 PHIL.354 Interpretation of the Bible: Old Testament (3)
 PHIL.355 Interpretation of the Bible: New Testament (3)

Sociology and Anthropology

- ANTH.207 Cultural Anthropology (3)
 ANTH.388 Peasant Cultures (3)

Theatre Arts

- THEA.211 History of Theatre and Drama I (3)
 THEA.212 History of Theatre and Drama II (3)
 THEA.241 Costume History and Design:
 Egypt to Renaissance (3)

Molecular Biology Track

Advisory Committee: PREISLER (*Chemistry, Coordinator*); RAWN (*Chemistry*); DENNISTON (*Biology*); HENRIKSON (*Biology*); KUNDIG (*Biology*); MECHLING (*Biology*)

The Program

The molecular biology track is a specialized field at the interface between chemistry and biology. Its goal is the understanding of heredity and other functions of life through the study of biological molecules and molecular processes. The student who wishes to pursue graduate research or laboratory work in this field will need a solid grounding in the principles of chemistry and the concepts of related fields of biology. The program will provide a strong preparation for graduate studies or employment in the research laboratory in the following areas: biochemistry, biophysics, cell biology, immunology, microbiology, and molecular biology. Students interested in medical or dental school would also benefit from the breadth and depth of the science course offerings.

Requirements for the Major

The curriculum presented below includes 30-33 upper-division credits of required courses and three upper-division elective credits. The course requirements for this thematic option reflect the interdisciplinary nature of molecular biology.

Required Courses

- BIOL.201 Biology I: Cellular Biology and Genetics (4)
 BIOL.318 Microbiology (4)
 BIOL.401 Genetics (4)
 BIOL.408 Cell Biology (4)
 CHEM.101- General Chemistry I and II (4,4)
 102
 CHEM.210 Principles and Methods of Chemical Analysis, (4)
 or
 CHEM.211 Quantitative Analytical Chemistry (5)
 CHEM.331- Organic Chemistry I and II (5,5)
 332
 CHEM.340 Physical Chemistry: Principles and Application (3)
 or
 CHEM.341- Physical Chemistry—Thermodynamics &
 342 Structure & Kinetics (3,3)
 CHEM.350 Principles of Biochemistry (5)
 or
 CHEM.355- Biochemistry and Biochemistry Laboratory
 356 (recommended) (3,2)
 PHYS.211- General Physics I and II (4,4)
 212
 or
 PHYS.241- General Physics I and II (strongly recommended)
 242 (4,4)

Electives

One of the following

BIOL.403	Advanced Genetics (3)
BIOL.421	Immunology (3)
CHEM.452	Advanced Biochemistry (3)

Recommended Courses

An independent research project related to molecular biology is also recommended, especially for those students contemplating graduate school. The appropriate courses are:

BIOL.491	Independent Research in Biology, (2-3)
	or
CHEM.491-494	Introduction to Research in Chemistry (1-3)

PRELAW

Students contemplating law school after graduation should make an appointment with the University's Prelaw Advisor, who is a member of the Department of Political Science. He can provide prospective students with a copy of the "Towson State Prelaw Handbook," introduce them to the Prelaw Society, and offer advice concerning courses of study, preparation for the Law School Admissions Test, and other matters pertaining to what students need for their application to law school. In general, students should concentrate on improving their reading, writing, and speaking skills. Information is available on the dual degree program at the University of Baltimore. Contact Dr. Fruchtman for additional information.

RELIGIOUS STUDIES

Advisory Committee: WOOD (English, Coordinator); BAILEY (Psychology); JOCHENS (History); JONES (Sociology)

The Program

The Religious Studies concentration is an interdisciplinary program which offers students the opportunity to study religion from a variety of perspectives. The program is administered by a faculty committee.

Requirements for the Major

As in all thematic options, 45 credits must be taken in upper-division courses. For the Religious Studies option, 36 credits must be from the approved list of courses having substantial religious content. No more than four lower-division credits may be applied to this 36 credit requirement, and no more than 21 of the 36 credits may be taken in any one department. The distribution of 18 of the 36 credits must be: six from the Department of History, six from the Department of Philosophy and Religion, and six from other departments.

Directed readings, research methods, independent study, honors thesis or minimester courses in religious topics, when approved by the Religious Studies committee, must be undertaken within the requirements of the department that offers them and with the approval of the teaching faculty member.

The following courses are approved for credit in the Religious Studies option. However, courses marked with an asterisk are only applicable during semesters when they have been approved for credit by the Religious Studies committee. The committee shall meet prior to pre-registration each semester to determine which of the courses marked with an asterisk shall be applicable for credit

to the Religious Studies program for the following semester. Students may also apply to the committee for approval of transfer credits from other colleges into the Religious Studies option within the existing college rules for transfer.

Approved Courses

*Indicates approval required each semester offered.

Art

ART.302	The Art of China (3)
ART.303	The Art of Japan (3)
ART.444	Byzantine to Gothic Art (3)
ART.445	Italian Renaissance Art: 15th & 16th Centuries (3)
ART.471	Art & Architecture of Ancient Greece (3)
ART.472	Art & Architecture of the Roman Empire (3)
ART.479	Baroque Art & Architecture (3)
ART.480	Eighteenth Century Art & Architecture (3)
ART.485	*Seminar in Art History (3)

English

ENGL.243	Introduction to Classical Mythology (3)
ENGL.270	*Ideas in Literature (3)
ENGL.341	History and Literature of the Old Testament (3)
ENGL.343	*Myth and Literature (3)
ENGL.471	*Topics in World Literature (3)
ENGL.472	*Topics in British Literature (3)
ENGL.473	*Topics in American Literature (3)
ENGL.485	*Seminar in English Studies I (3)
ENGL.486	*Seminar in English Studies II (3)
ENGL.490	*Directed Studies in English (2-4)
ENGL.494	*Travel and Study (3-6)

History

HIST.211	Christianity From Jesus to Luther (3)
HIST.277	A Survey of Jewish History (3)
HIST.303	Hellenistic Civilization (3)
HIST.361	American Intellectual and Religious History (3)
HIST.401	The Early Middle Ages, 300-1050 (3)
HIST.402	The High Middle Ages, 1050-1350 (3)
HIST.404	The Reformation: 1500-1648 (3)
HIST.485	History Seminar (3)
HIST.491	*Biographical Studies in History (3)
HIST.492	*Historical Themes (3)
HIST.494	*Travel and Study (3-6)
HIST.496	*Colloquium (3)
HIST.497	*Directed Reading (2-4)

Philosophy and Religion

PHIL.211	Protestant, Catholic, Jew (3)
PHIL.301	Philosophies of India (3)
PHIL.302	Philosophies of China and Japan (3)
PHIL.322	Late Classical and Medieval Philosophy (3)
PHIL.341	*Ethics (3)
PHIL.351	*Contemporary Ethical Problems (3)
PHIL.354	Interpretation of the Bible: Old Testament (3)
PHIL.355	Interpretation of the Bible: New Testament (3)
PHIL.451	Philosophy of Religion (3)
PHIL.457	Comparative Religion (3)
PHIL.470-479	*Philosophical Problems (3)
PHIL.495	*Research Tutorial in Philosophy (3)

Psychology

PSYC.381	*Readings in Psychology (1-2)
PSYC.491	*Independent Investigation in Psychology (3)
PSYC.499	*Senior Thesis in Psychology (4)

Sociology and Anthropology

SOCI.470-479	*Special Topics in Sociology (3)
SOCI.485	Seminar in Sociology (3)
SOCI.495	*Independent Research (3)

ANTH.364	Religion, Magic and Witchcraft (3)
ANTH.470-479	*Special Topics in Anthropology (3)
ANTH.495	*Independent Research (3)

WOMEN'S STUDIES

Advisory Committee: PILARDI (*Philosophy*); COULTER (*English*); ALLISON (*Continuing Studies*); KENNARD (*Physical Education*); BERIS (*Women's Studies*); RABIN (*Psychology*); JOCHENS (*History*); ROTHSTEIN (*Anthropology*); WILKOTZ (*English*); HIMES (*History*); ROYAK-SCHALER (*Health*), FIX (*Art*); HEDGES (*English*)

OFFICE

Linthicum Hall, Room 201F, (301) 321-2860

The Program

The Women's Studies concentration within the General Studies major is an interdisciplinary program which offers students the opportunity to study the particular nature and role of women as individuals and as members of society. The concentration consists of 12 hours in a core curriculum of four interdisciplinary courses, plus a minimum of 18 hours selected from other courses in women's studies. Women in Perspective (WMST.231) is strongly recommended as preparation for any upper-division work in women's studies. Each program is individually tailored to the needs and interests of the student. Students must consult with a women's studies faculty advisor to plan their program. The student is reminded that a total of 45 upper-division hours, including the hours in women's studies, is required for the completion of a General Studies major.

The Women's Studies concentration is administered by a committee of faculty and students. The faculty members on the committee will serve as advisors to students majoring in the program.

The following interdisciplinary and departmental women's studies courses are currently in the curriculum. More courses are under development. The departmental courses can be taken as electives for departmental credit and/or applied to the thematic concentration in women's studies. Some courses fulfill General University Requirements.

Requirements for the Major

Required Core Courses (12 credits)

WMST.231	Women in Perspective (3)
WMST.332	Women's Culture and Creativity (3)
WMST.335	Women, Work, and Family (3)
WMST.337	Feminism (3)

Approved Courses

Majors must complete a minimum of 18 additional credits in women's studies selected from any of the following departments. Twelve hours must be taken at the 300-400 upper-division course level.

Interdisciplinary General Studies

WMST.333	Women's Words, Women's Lives (3)
WMST.370	Topics in Women's Studies (3)
WMST.481	Directed Readings for Honors in Women's Studies (3-4)
WMST.485	Seminar in Women's Studies (3)
WMST.491	Directed Readings in Women's Studies (1-4)
WMST.496	Practicum in Women's Studies (3)
WMST.499	Honors Thesis (3)

Art

ART.216	The Image of Women in Art (3)
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Economics and Political Science

POSC.437	Special Topics in Political Science: (Women, Politics, & Law) (3)
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Education

EDUC.463	Sex Role Development in the Schools (3)
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English

ENGL.017	Canadian Women Writers (3)
ENGL.271	Themes in American Literature: Ethnic Women (3)
ENGL.271	Themes in American Literature: The Image of Woman in American Literature (3)
ENGL.370	Special Topics: Literature of Women (3)
ENGL.371	Women Poets: Themes and Images (3)
ENGL.372	Women Writers (3)
ENGL.373	The "New Woman": Sex and Social Change in American Literature (3)
ENGL.477	Afro-American Women Writers (3)

Health Science

HLTH.010	Perspectives on Rape and Sexual Assault (3)
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History

HIST.147	History of American Women (3)
HIST.245	History of European Women (3)
HIST.492	Historical Themes: African-American Women in History (3)
HIST.492	Historical Themes: Minority Women (3)
HIST.492	Historical Themes: Third World Women (3)

Modern Languages

FREN.437	Women Writers in Translation (3)
SPAN.472	Latin-American Women Writers (3)

Music

MUSC.205	Women in Music (3)
MUSC.479	Special Topics in Music Literature: Women in Music (3)

Philosophy

PHIL.270-279	Philosophical Perspectives: Current Feminist Texts (3)
PHIL.331	Concepts of Woman: An Historical Approach (3)
PHIL.440-449	Philosophical Systems (Simone de Beauvoir) (3)
PHIL.470-479	Philosophical Problems (Contemporary Feminist Philosophy) (3)

Physical Education

PHEC.441	The American Woman in Sport (3)
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Psychology

PSYC.447	Sex Differences: Psychological Perspectives (3)
PSYC.457	Gender Identity in Transition (3)

Sociology and Anthropology

ANTH.321	Sex Roles in Cross-Cultural Perspective (3)
SOCI.370-379	Topics in Sociology (Women and the Criminal Justice System) (3)

Speech and Mass Communication

MCOM.205	Images of Women in Film (3)
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Theatre Arts

THEA.305	Feminist Theatre (3)
THEA.405	Acting and Writing for Feminist Theatre (3)

Minor in Women's Studies

The minor in Women's Studies is also offered at Towson State. A minor is the way in which many students are using women's studies courses. That is, many students will wish to major in a

traditional subject (history, English, sociology), but want to take special work in women's studies within that subject, to which end they take many women's studies courses. Some students plan to do graduate work in a traditional discipline, with emphasis on women within it.

Requirements for the Minor

WMST.231 Women in Perspective (3)
plus
15 hours in other departmental or General Studies women's studies courses, at least 12 hours of which shall be upper-division.

MEETING GENERAL UNIVERSITY REQUIREMENTS

Several Women Studies courses fulfill General University Requirements. WMST.332, Women's Culture and Creativity; WMST.335, Women, Work and Family; WMST.231, Women in Perspective all fulfill Group III requirements. WMST.333, Women's Words, Women's Lives is an approved advanced writing course for Group IC.

TRANSFER CREDIT POLICY

Students may transfer no more than 12 of the 30 credits required for the Women's Studies major concentration, and no more than 6 of the credits required for the minor.

HONORS PROGRAM

Honors work is available to students with a Women's Studies major concentration. Interested students should consult the Women's Studies Coordinator for information, preferably during their sophomore year.

Department of Geography and Environmental Planning

Professor: McKIM

Associate Professors: DILISIO (*Chair*), HADDOCK, SCOTT

Assistant Professors: da SILVA, HAYUK, MORGAN, STEVENSON

OFFICE

Linthicum Hall, Room 20, (301) 321-2973

PROGRAMS OF THE DEPARTMENT

The Department of Geography and Environmental Planning offers the following programs: the *major in Geography*, the *minor in Geography*, the *Master of Arts in Geography and Environmental Planning*, and the *Master in Education with an emphasis in Geography*. For more information about the graduate programs, consult the *Graduate School Catalog*.

The purpose of the major is to encourage students to explore the discipline in depth. Such investigation leads to an appreciation of the structure and function of the subject, prepares the student for graduate work, and offers background for many careers particularly in private industry, planning, government service, and teaching. Students are also expected to take correlative courses which broaden their academic background and offer valuable insights into the subject.

Cartography Certificate Program

The department offers an 18 semester hour program leading to a Certificate in Cartography. The program is designed for undergraduate, graduate, and non-degree students seeking skills in cartography. For more information contact Mr. Marshall Stevenson.

Credential of Proficiency in Planning

The department offers an 18 semester hour program leading to a Credential of Proficiency in Planning. The credential may be earned within the 33 semester hour Geography major. The program is also open to all full-time and continuing studies students. For more information contact Dr. James DiLisio.

Geography/Environmental Planning and Economics

Students interested in geography and economics should consider majoring in both disciplines. For further information and counseling contact the Geography and Environmental Planning Department.

MAJOR IN GEOGRAPHY

Geography majors are required to complete 33 credits from among the following courses. A grade of "C" or higher is required in all courses in the major and minor.

The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. This requirement can be met by completing the intermediate course of a modern foreign language or the equivalent.

Requirements for the Major

Required Courses

Lower-Division Courses (6-9 credits)

GEOG.101 Physical Geography (3)
GEOG.102 World Regional Geography (3)
or
GEOG.105 Geography of International Affairs (3)
or
GEOG.109 Intro to Human Geography (3)

Systematic or Technique Courses (9 credits)

GEOG.323 Cartography & Graphics I (3)
GEOG.375 Quantitative Methods (3)
GEOG.xxx One upper-division Systematic or Technique course (3)

Upper-Division Courses (15-18 credits)

Choose 15-18 credits of upper-division courses, including
GEOG.401 Growth of Geographic Thought (3)

A combined total of no more than 12 semester hours from the following courses is allowed in the major: GEOG.491, 494, 495, 496.

MINOR IN GEOGRAPHY

Students minoring in Geography must complete 18 credit hours in geography and environmental planning courses. Six credit hours must be at the 100-200 level, and 12 credit hours from the 300-400 level. A grade of "C" or higher is required in all courses in the minor.

GEOGRAPHY SECONDARY EDUCATION PROGRAM

Required in Major (33 hours): Lower Division (100's-200's) courses (6-9); Upper Division (300's-400's) courses (15-18). (At least nine hours of which must be courses designated as systematic or technique courses.)

Required in Related Subjects (33 hours): History courses: HIST.145, HIST.146, HIST.101 plus 6 hours of history electives; Political Science: POSC.101; Sociology: SOCI.101; Economics: ECON.201 and ECON.202; Anthropology: either ANTH.207, ANTH.208, or ANTH.209; and a specified Topics in Social Science course.

TRANSFER CREDIT POLICY

Geography majors may transfer up to 12 hours toward a major and must earn 21 upper-division credits at Towson.

Geography minors may transfer up to six hours toward a minor and must earn 12 upper-division credits at Towson.

SPECIAL DEPARTMENTAL PROGRAMS

The department sponsors the Beta Delta Chapter of Gamma Theta Upsilon, an international geography honorary society. GTU holds lectures, and presents films and speakers on topics in geography and planning. All Geography majors are welcome to join.

The department offers internships through the Cooperative Education Office. An annual Careers Day is held for Geography majors seeking employment.

Travel studies are available during the minimester and summer to Europe, Arizona, Mexico, and Hawaii.

The National Council for Geographic Education awards are given to academically outstanding graduating majors.

GRADUATE PROGRAM

The master of arts degree program in geography and environmental planning is designed to prepare students for doctoral programs as well as for career opportunities in private business and public agencies. The program is oriented toward applied geography and presents possibilities for an emphasis in the following areas: urbanregional planning, urban studies, public policy issues, physical geography, environmental assessment, energy resources, culturalhistorical geography, medical geography, population, area studies, cartography, and computer applications.

Graduate students in geography and environmental planning are encouraged to take pertinent coursework in other departments. The student may pursue either the Thesis Program (24 credits and a 6-credit thesis) or the Non-Thesis Program (36 credits). Detailed information is given in the *Graduate School Catalog*.

Department of History

Professors: ANDREWS, BLUMBERG, ESSLINGER, HIRSCHMANN, JOCHENS, KAHL (*Chair*), LAREW, D. MARTIN, MCWILLIAMS, MRUCK, PIOTROWSKI, RIVERS, RYON, VAN OSDELL, WHITMAN

Associate Professors: SCHOLNICK

Assistant Professors: ELDRIDGE, HIMES, SLADEK

OFFICE

Linthicum Hall, Room 119F, (301) 321-2923

PROGRAMS OF THE DEPARTMENT

The Department of History offers the following programs: the *major in History*; the *History Secondary Education Major*, for students planning to teach history at the secondary level; and the *minor in History*. Each of these programs encourages students to explore the study of history in depth. Such investigation leads to an ap-

preciation of the structure and function of the discipline, prepares the student for teaching, for graduate work, and for the study of law, theology, archival management, library science, historical preservation and museology. Skills, as well as historical knowledge acquired through the study of the discipline, may also lead to career opportunities in public history, federal, state, local government, and in business and industry. Students may opt for more career flexibility by choosing double majors or by combining a History major with another minor or by combining another major with a History minor: history and art, history and English, history and economics, history and business, history and communications, for examples. History majors and minors are also expected to take correlative courses that broaden their academic background and offer valuable insights into their major subject. The Department of History also strongly recommends the completion of the intermediate level of a foreign language.

The department offers courses in the fields of American, European, Asian, African, and Latin American history. The offerings are varied. Some courses are chronological, topical or national in scope. Others are in women's, ethnic, business, social, cultural or political history. All courses offered encourage an appreciation of the historical past through lecture/discussion, reading, analysis, and writing. Since history explores all aspects of human endeavor, history courses touch upon the insights of all disciplines from the historical perspective.

The Practicum is a practical application of historical knowledge and skill. The Practicum may be taken at institutions such as the Maryland Historical Society, Baltimore City Archives, Baltimore Industrial Museum, Jewish Historical Society, or Towson State University Archives.

The department participates in interdisciplinary programs such as International Relations and Social Science, and in General Studies concentrations in American Studies, African-American Studies, Comparative Ethnic Studies, Women's Studies, Religious Studies, Latin American Studies, Asian Studies, and Medieval and Renaissance Studies.

MAJOR IN HISTORY

In addition to the General University Requirements, History majors are required to complete 36 credits with a grade of "C" or higher from among the following courses. The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate courses of a modern foreign language or the equivalent.

Requirements for the Major

Required Courses (18 credits)

HIST.145	History of the United States to the Mid-Nineteenth Century (3)
HIST.146	History of the United States Since the Mid-Nineteenth Century (3)
HIST.241	History of European Civilization Through the Seventeenth Century (3)
HIST.242	History of European Civilization From the Seventeenth Century (3)
HIST.290	Introduction to Historical Study (3)

One of the following

- African History Course (3)
- Asian History Course (3)
- Latin American History Course (3)

Electives (18 credits)

Students must complete 18 credits of electives offered by the department, at least 12 of which must be in upper-division courses. Within the 18 credits of electives, there must be at least one three

credit course in two of the three fields: American, European, and the others (Ancient, Asian, African, Latin American, and World). No more than two upper-division courses may be taken with the same instructor (Seminar, Directed Reading, Directed Research, Colloquium, and Travel and Study are excepted).

MINOR IN HISTORY

History minors are required to complete 24 credits with a grade of "C" or higher from among the following courses.

Requirements for the Minor

Required Courses (6 credits)

HIST.290 Introduction to Historical Study (3)

One of the following

HIST.107 Introduction to History of Islamic Civilization (3)
 HIST.109 Introduction to the Civilization of India (3)
 HIST.116 Introduction to Chinese Civilization (3)
 HIST.117 Introduction to Japanese Civilization (3)
 HIST.121 Latin America: Colonial Period (3)
 HIST.122 Latin America: National Period (3)
 HIST.133 History of Africa: Earliest Times to the Nineteenth Century (3)
 HIST.134 History of Africa: Nineteenth Century to the Present (3)

Lower-Division History Electives (9 credits)

Upper-Division History Electives (9 credits)

HISTORY: SECONDARY EDUCATION

History majors may wish to obtain certification to teach history at the secondary level. Students in this Secondary Education program receive certification to teach in Maryland upon graduation. See Secondary Education Department requirements.

In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 54 credits with a grade of "C" or higher from among the courses listed below. Of the 54 credits, 18 must be completed in the required history courses, and 15 in social science courses before Student Teaching.

Requirements for the Major

Required Courses in History (18 credits)

HIST.145 History of the United States to the Mid-Nineteenth Century (3)
 HIST.146 History of the United States Since the Mid-Nineteenth Century (3)
 HIST.241 History of European Civilization Through the Seventeenth Century (3)
 HIST.242 History of European Civilization From the Seventeenth Century (3)
 HIST.290 Introduction to Historical Study (3)

One of the following

African History Course (3)
 Asian History Course (3)
 Latin-American History Course (3)

History Electives (12 credits)

Twelve credits of electives offered by the department, at least 9 of which must be in courses at the 300-400 level. Within the 12 credits of electives, there must be at least one three-credit course in two of the three fields: American, European, and the others (Ancient, Asian, African, Latin American, and World).

Required Courses in Social Sciences (24 credits)

ECON.201 Microeconomic Principles (3)
 ECON.202 Macroeconomic Principles (3)

GENL.401 Topics in Social Science (3)
 SOCI.101 Introduction to Sociology (3)

One of the following

GEOG.101 Physical Geography (3)
 GEOG.102 World Regional Geography (3)
 GEOG.105 Geography of International Affairs (3)
 GEOG.109 Introduction to Human Geography (3)

Two of the following

POSC.101 Introduction to Political Science (3)
 PSOC.103 American National Government (3)
 POSC.107 Introduction to International Relations (3)
 POSC.137 Introduction to Comparative Politics (3)
 POSC.207 State Government (3)

One of the following

ANTH.207 Cultural Anthropology (3)
 ANTH.209 American Culture (3)

SPECIAL RECOMMENDATIONS FOR MAJORS AND MINORS

Students must declare their majors and minors in the History Department. The major or minor should be declared during the second semester of the freshman year or at the beginning of the sophomore year. Students will be given *major/minor forms listing additional rules for a History major/minor*. They will also be required to select an academic advisor who will help in preparing a program of courses. Students should consult their advisors regularly. Students also must update their records each semester. A liberal arts History minor who wishes to student teach must have completed 15 credits of the required courses in history.

TRANSFER CREDIT POLICY

No more than 18 credits in history will be accepted toward a major or a minor from a regionally accredited four year college. No more than 12 lower-division credits in history will be accepted toward a major or a minor from a regionally accredited two year college. The 12 credits must be in lower-division courses which have Towson equivalents at the 100-200 level.

DEPARTMENTAL HONORS, ACTIVITIES

The department offers an honors program in History. Eligibility requirements and rules governing the departmental honors programs are described elsewhere in this *Catalog*. Students interested in the history honors program should consult their advisor and the chair of the department no later than the first semester of their junior year.

The department sponsors the Theta Beta Chapter of the national history honor society, Phi Alpha Theta. The society presents lectures, films, and other programs. The student may inquire about membership requirements at the office of the Department of History.

The department also offers travel-study courses that in the past have introduced students to China, Japan, Mexico and several European countries.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The Department of History awards credit through the Advanced Placement program of the university. The department also offers credit for lower-division courses, and for upper-division courses upon appeal, through the Credit for Prior Learning program. Students applying for credit under this program complete a departmental examination, an interview, and a paper or book review in the field.

International Studies Program

Advisory Committee: DENT (*Political Science, Coordinator*);
BELGRAD (*Political Science*); GIRO (*Modern Languages*);
McKIM (*Geography and Environmental Planning*);
McWILLIAMS (*History*); MERANI (*Political Science*);
ROTHSTEIN (*Anthropology*); WEINTRAUB (*Economics*)

OFFICE

Linthicum Hall, Room 118J, (301) 321-2957 or 321-2958

THE PROGRAM

The International Studies program is designed primarily as preparation for students planning careers in government, foreign service, international trade, finance and business, economic development, and international education. The program aims to achieve a global perspective through an interdisciplinary network of courses and experiences which will lead to a *Bachelor of Arts degree in International Studies*.

The program is administered by a committee composed of representatives from the following disciplines: international business, economics, geography and environmental planning, history, political science, and sociology/anthropology.

MAJOR IN INTERNATIONAL STUDIES

All students majoring in International Studies will complete 30 credit hours of required courses and 15 credit hours of related upper-division electives under one of the two plans listed below:

Plan A—Regional Track

Under this plan students concentrate on a particular world region such as Asia, Latin America, Western Europe, etc. and complete 15 upper-division credits in courses related to the student's geographical area of concentration.

Plan B—Non-Regional Track

Under this plan students complete 15 upper-division credits of approved elective courses relating to international affairs.

Requirements for the Major

Thirty required credits, 15 credits of upper-division related electives, and foreign language proficiency through Intermediate II (4 semesters of college-level foreign language) are needed to complete the major in International Studies.

Required Courses (30 credits)

ANTH.207	Cultural Anthropology (3)
ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
GEOG.105	Geography of International Affairs (3)
GEOG.381	Political Geography (3)
MNGT.355	Introduction to International Business (3)
POSC.303	Theory of International Politics (3)*
POSC.428	Political Theory II (3)*

One of the following

ECON.323	Comparative Economic Systems (3)
ECON.325	Economic Development (3)
ECON.421	International Economics (3)

One of the following

HIST.151	The World Since 1945 (3)
HIST.370	Diplomatic History of U.S. Since 1900 (3)

HIST.479 History of Diplomacy (3)

*Students should consult their advisors concerning the prerequisites for these courses.

Related Electives (15 credits, upper-division)

These courses must be selected by students with the written approval of their advisor in International Studies. Each advisor has a current list of approved courses in International Studies that students must use in selecting these electives. Students who are under Plan A (regional concentration) must have at least three of their five related elective courses in their area of regional concentration.

Foreign Language Requirement

Students should plan on achieving a level of proficiency in one foreign language that is the equivalent of four semesters of college level foreign language training. This requirement may be completed by taking Elements I and II and Intermediate I and II or by an Equivalence Examination at the Intermediate level administered each November by the Department of Modern Languages. Students who have completed several years of foreign language in high school should consult with the Chair of Modern Languages to determine the number of courses or credits needed to fulfill this requirement for the major.

TRANSFER CREDIT POLICY

Transfer students must take a minimum of 18 credits of upper-division courses in international studies at Towson State to fulfill the requirements for the major.

INTERNATIONAL STUDIES ACTIVITIES AND PROGRAMS

The International Studies major offers students the opportunity to participate in the following special programs and activities:

- Editing and managing the *Towson State Journal of International Affairs* for academic credit.
- An annual Model Organization of American States (OAS) in Washington, D.C. for academic credit
- The Naval Academy's Foreign Affairs Conference.
- The annual Earle T. Hawkins Symposium on International Affairs.
- Internships for academic credit in Washington, D.C. and metropolitan Baltimore.
- Foreign travel and study abroad programs for academic credit.

Department of Modern Languages

Professors: GIRO (*Chair and Graduate Program Coordinator*),
MAGILL, POIRIER

Associate Professors: EVANS, LEETCH, LEVNO

Assistant Professors: GOOLEY, LIMA, HAUPT, McLUCAS,
O'PECKO

Regular Part-Time: BRAUN

OFFICE

Linthicum Hall, Room 319 F/G, (301) 321-2883

PROGRAMS OF THE DEPARTMENT

The Department of Modern Languages offers the following programs: 1) *the major or minor in French, German and Spanish*; 2) *the major in French, German and Spanish in Secondary Education*; 3) *the major in French, German and Spanish Literature*; 4) *the major in French, German and Spanish in Professional Program*; 5) *the Certificate of Proficiency in French, German and Spanish*, for non-language majors or minors planning for careers which require reasonable oral and written competency in a foreign language; and 6) *language electives*, for all students who wish to acquire a reading or conversational ability in one of the following languages: Russian, Chinese, Portuguese, Hebrew, Japanese, Greek, Latin, Italian and Hindi. Expansion of these non-major languages will be made in response to expressed student interest.

Students majoring or minoring in French, German or Spanish must declare their major or minor in the Modern Languages Department and are required to have academic advisors in their major and minor field and maintain close contacts with the faculty advisors in order to select and prepare their course of study. Majors should see their advisors at least once a semester. It is recommended that the major be declared during or before the sophomore year.

Culture and Civilization Course Requirement

The requirement of six hours of Culture and Civilization for Spanish majors is strongly felt by the Spanish faculty to be a necessity in their program, primarily because of the great diversity of Spanish-speaking countries in Europe, South America and Central America, and the importance of a knowledge of this diversity for all who teach or otherwise use Spanish. The French faculty feels likewise that French Culture and Civilization represents a necessary aspect of the language program and considers it important since the study of the culture and civilization of the French-speaking people and their countries cannot be separated from the study of the language. The German Culture & Civilization course is required for the Program in Teacher Education in German.

Dual Majors

The Department of Modern Languages encourages its language majors in French, German or Spanish to carry an additional major in either another language or combine their language with another field of study. Interested students should consult the Modern Languages Department.

FRENCH

MAJOR IN FRENCH LITERATURE

In addition to the General University Requirements, French Literature majors must complete 30 credit hours with a grade of "C" or higher in French beyond the intermediate level. Of the 30 hours, at least 15 credit hours must be taken at Towson State University.

Required Courses (15 credits)

FREN.301-302	Composition and Conversation I, II (3, 3)
FREN.311	Culture & Civilization I (3)
	or
FREN.312	Culture & Civilization II (3)
FREN.321-322	Survey of French Literature I, II (3, 3)

Electives

Fifteen hours in the target language, including nine hours of literature at the 400 level are required.

FRENCH SECONDARY EDUCATION PROGRAM

French majors may wish to obtain certification to teach French at the secondary level. Students in this Secondary Education pro-

gram receive certification to teach in Maryland upon graduation. In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 30 credits with a grade of "C" or higher beyond the Intermediate level from among the following courses.

Majors who are in the Secondary Education program are required to take Advanced Grammar and Method of Teaching a Foreign Language before student teaching.

Required Courses (24 credits)

FREN.301-302	Composition and Conversation I, II (3, 3)
FREN.311	Culture and Civilization I (3)
	or
FREN.312	Culture and Civilization II (3)
FREN.321-322	Survey of French Literature I, II (3, 3)
FREN.391	Advanced Grammar (take before student teaching) (3)
FREN.401	French Phonetics (3)
FREN.402	Applied French Linguistics (3)

Electives

Six hours of electives at the 400 level are required.

MAJOR IN FRENCH PROFESSIONAL PROGRAM

In addition to the General University Requirements, French majors in this program must complete 30 credits with a grade of "C" or higher beyond the Intermediate level. The Internship in French is generally completed in the student's junior or senior year. Electives recommended by the department are French for Business and French Phonetics.

Required Courses (18 credits)

FREN.301-302	Composition & Conversation I, II (3, 3)
FREN.311	Culture and Civilization I (3)
	or
FREN.312	Culture and Civilization II (3)
FREN.321-322	Survey of French Literature I, II (6)
FREN.497	Internship (3)

Electives

Twelve hours are required, six of which must be at the 400 level in the literature of the target language.

GERMAN

MAJOR IN GERMAN LITERATURE

In addition to the General University Requirements, German majors must complete 30 credits with a grade of "C" or higher beyond the Intermediate level. Of the 30 hours, at least 15 credit hours must be taken at Towson State University.

Required Courses (12 credits)

GERM.301-302	Composition and Conversation I, II (3, 3)
GERM.321	Survey of German Literature I (3)
GERM.341	Readings in Contemporary German (3)

Electives

Eighteen hours of electives in the target language are required including nine hours of literature at the 400 level.

GERMAN SECONDARY EDUCATION PROGRAM

German majors in the Secondary Education program receive certification to teach in Maryland upon graduation. In addition to the General University Requirements, and the requirements specified

by the Department of Secondary Education, students must complete 30 credits with a grade of "C" or higher beyond the Intermediate level from among the following courses. Stylistics is recommended as an elective.

Required Courses (21 credits)

GERM.301-302	Composition and Conversation I, II (3, 3)
GERM.311	Culture and Civilization (3)
GERM.321	Survey of Literature I (3)
GERM.341	Readings in Contemporary German (3)

Electives

Nine hours of electives are required at the 400 level. (Phonetics course will be offered every three semesters or in accordance with student needs.)

MAJOR IN GERMAN PROFESSIONAL PROGRAM

In addition to the General University Requirements, German majors must complete 30 credits with a grade of "C" or higher beyond the Intermediate level in the following courses. The Internship in German is completed in the student's junior or senior year. Electives recommended are Culture and Civilization and Stylistics.

Required Courses (15 credits)

GERM.301-302	Composition and Conversation I, II (3, 3)
GERM.321	Survey of German Literature I, II (3, 3)
GERM.341	Readings in Contemporary German

Electives

Fifteen hours of electives are required, six of which must be at the 400 level in the literature of the target language.

SPANISH

MAJOR IN SPANISH LITERATURE

In addition to the General University Requirements, Spanish Literature majors must complete 30 credits with a grade of "C" or higher beyond the Intermediate level in the following courses. Of the 30 hours at least 15 credit hours must be taken at Towson State University.

Required Courses (18 credits)

SPAN.301-302	Composition and Conversation I, II (3, 3)
SPAN.311-312	Culture and Civilization I, II (3, 3)
SPAN.321-322	Survey of Spanish Literature I, II (3) (3)

Electives

Twelve hours of electives are required in the target language, including nine hours of literature at the 400 level.

SPANISH SECONDARY EDUCATION PROGRAM

Spanish majors in the Secondary Education program receive certification to teach in Maryland upon graduation. In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 30 credits with a grade of "C" or higher beyond the Intermediate level in the following courses.

Required Courses (27 credits)

SPAN.301-302	Composition and Conversation I, II (3, 3)
SPAN.311-312	Culture and Civilization I, II (3, 3)
SPAN.321-322	Survey of Literature I, II (3, 3)
SPAN.391	Advanced Spanish Grammar (3)

SPAN.401	Spanish Phonetics (3)
SPAN.402	Spanish Linguistics (3)

Required Literature Courses

Three hours of a 400-level literature course must be taken in the target language.

MAJOR IN SPANISH PROFESSIONAL PROGRAM

In addition to the General University Requirements, Spanish majors must complete 30 credits with a grade of "C" or higher beyond the Intermediate level. The Internship in Spanish is completed in the student's junior or senior year. The department recommends Spanish for Business as an elective.

Required Courses (21 credits)

SPAN.301-302	Composition and Conversation I, II (3, 3)
SPAN.311-312	Culture and Civilization I, II (3, 3)
SPAN.321-322	Survey of Spanish Literature I, II (3, 3)
SPAN.497	Internship (3)

Electives

Nine hours are required, six of which must be at the 400 level in the literature of the target language.

MINOR IN MODERN LANGUAGE

This program is designed to provide majors in other disciplines with the educational background necessary to broaden and enhance their career opportunities and to enable teacher candidates to meet the requirements for a Maryland State Department of Education teaching certificate.

The minor in French, German and/or Spanish requires students to complete 12 upper-division credit hours plus the Intermediate level courses I, II, to complete 20 credits. SCED.353, Teaching Modern Language in the Secondary Schools, is required of teaching candidates in addition to the minor.

Language minors may transfer up to eight hours toward a minor and must earn 12 upper-division credit hours at Towson.

The minor should be approved by the student's Modern Languages Department advisor.

Requirements for the Minor

Required Courses (20 credits)

Intermediate Level Courses I and II (4,4)
Composition and Conversation I or II (3)
Culture and Civilization I or II (3)
Advanced Grammar (3)
Elective course (3)

CERTIFICATION OF PROFICIENCY IN A MODERN FOREIGN LANGUAGE

The Department of Modern Languages has designed a program of studies that offers the non-language major a Certificate of Proficiency in French, German or Spanish upon satisfactory completion of prescribed requirements.

The Certificate of Proficiency may be earned by a degree candidate at Towson State University as well as by an individual whose sole interest in attending the university is for the purpose of obtaining the certificate.

A Certificate of Proficiency is an important document for those individuals who are planning or practicing careers which require reasonable oral and written competency in a given modern language. In the job market, national and international, we are aware that a large number of opportunities await persons whose knowledge of one or more modern foreign languages has been well

established through intensive college study. The Certificate of Proficiency is quite advantageous for aspiring professionals in the fields of communications, public services, business and finance, agriculture, transportation, health services, education, energy, natural resources, journalism, law, foreign service, governmental service, air traffic management, import/export purchasing and selling, etc.

In order to receive the Certificate of Proficiency, the student must pass all required courses with acceptable grades (A, B or C's). The student who is prepared to begin at the advanced level will need to complete 12 credits of study whereas the student who begins at the elementary level will have to earn 28 credits in the particular language.

Requirements for the Certificate of Proficiency in French, German or Spanish

Required Courses (28 credits)

101-102	Elements (4,4)
201-202	Intermediate I, II (4,4)
301	Composition and Conversation I, (3) or
302	Composition and Conversation II (3)
311	Culture and Civilization I (3) or
312	Culture and Civilization II (3)
391	Advanced Grammar (3)
495	Practicum for the Certificate of Proficiency (3)

Special courses will be planned and introduced in accordance with student needs.

MEETING GENERAL UNIVERSITY REQUIREMENTS

The completion of the intermediate level, or its equivalent, is required of all candidates for the Bachelor of Arts degree. This requirement may be met by (a) completing two or more years of the language in high school plus the intermediate level courses in college, (b) completing the elementary and intermediate level courses in the language in college, *(c) successfully completing an equivalence examination administered once a year, during November, by the Department of Modern Languages at Towson State University, (d) successfully completing one semester of any course beyond the intermediate level or *(e) successfully completing a credit for experience examination at the 300 level administered once a year, during November, by the Department of Modern Languages at Towson State University.

*Students interested in (c) or (e) should consult the Modern Languages Department for further information.

COMPETENCY CREDITS IN MODERN FOREIGN LANGUAGES

Degree candidates successfully completing courses numbered 102, 201, 202, or 301 in French, German or Spanish at Towson State may earn a maximum of eight (8) credits for the two preceding courses if the course in which they are enrolled is successfully completed with a grade of "C" or higher in the first attempt. Students registering for any of these language courses for the purpose of receiving competency credits must select the regular grading option. Students may attempt to earn competency credits by completing a higher level language course only once. Students should consult the Modern Languages Department for detailed information about the Competency Credits in foreign languages.

PLACEMENT IN LANGUAGES

The Modern Languages Department's policy regarding placement of entering students with high school language study follows:

1. One year of high school language study, the student may register for 101 or 102.
2. Two years of high school language study, the student may register for 102 or 201.
3. Three years of high school language study, the student may register for 201 or 202.
4. Four years of high school language study, the student may register for 202 or any 300 level course.
5. Five years of high school language study, the student may register for any 300 level course.

Students will normally want to register for the higher level course for which they are qualified. Deviations from this plan must be approved by the Department of Modern Languages.

TRANSFER CREDIT POLICY

Transfer students may transfer a maximum of 15 hours toward the major.

HONORS PROGRAM

The Department of Modern Languages participates in the University Honors Program. Students interested in completing a language major with honors should consult the department Honors Board representative no later than the first semester of their junior year.

SPECIAL DEPARTMENTAL PROGRAMS

The department sponsors the Eta Gamma Chapter of the National Spanish Honor Society, Sigma Delta Pi and encourages all Spanish students to participate in the activities of the Society.

The department offers internship and practicum programs through the Cooperative Education Office.

A junior year abroad in France and a travel studies program to Spain are also available.

The Modern Languages department is a testing center for the Certificat Pratique du Francais Commercial et Economique.

Students may take the test for the "Certificat" after having completed the French for Business course.

GRADUATE PROGRAM

A Master in Education with a specialization in French or Spanish and the Master of Arts in Foreign Languages with a concentration in French, German and/or Spanish are also available through this department. See the *Graduate School Catalog* for details of this program.

Department of Philosophy and Religion

Professors: deBRABANDER, FUCHS, MURUNGI (*Chair*)

Assistant Professors: BURNOR, CHRISTIAN, EVANGELIOU, PILARDI

Instructor: KEALEY

OFFICE

Linthicum Hall, Room 219F, (301) 321-2755

PROGRAMS OF THE DEPARTMENT

Through the study of the arts, sciences and religion, philosophy attempts to uncover the often hidden or implied assumptions of

a culture. As a result, philosophy seeks to give students some unity to all the knowledge they acquire in college. It develops the habits of precise thinking and reflection. Philosophy is basic to a liberal education and is of special value in preparation for many areas of endeavor, especially for the law, the ministry and politics.

The Department of Philosophy and Religion offers the *major and minor in Philosophy*. The program is designed to encourage students to take as great a diversity of courses as possible. Courses offered by the department are historical, systematic, analytic or speculative, according to the nature of the course, the interest of the instructor, and the composition of the particular class. The attitude that informs all courses is scholarly or speculative, rather than sectarian or dogmatic.

In exceptional instances the student may, with the permission of the chair, make substitution of courses within the department for required courses, e.g., a higher numbered course may be substituted for a lower numbered course. Three credits may, with the permission of the chair, be taken in an allied discipline.

MAJOR IN PHILOSOPHY

The major in Philosophy requires 33 credits with a grade of "C" or higher from among the following courses.

Requirements for the Major

Required Courses (6 credits)

PHIL.111	Logic (3)
PHIL.341	Ethics (3)

Three of the following

PHIL.221	Ancient Greek Philosophy (3)
PHIL.322	Late Classical and Medieval Philosophy (3)
PHIL.323	Late Medieval and Renaissance Philosophy (3)
PHIL.324	Modern Philosophy (3)
PHIL.325	Schools of Contemporary Philosophy (3)

Two of the following

PHIL.231	Introduction to the Philosophy of Science (3)
PHIL.301	Philosophies of India (3)
PHIL.302	Philosophies of China and Japan (3)
PHIL.326	American Philosophy (3)

Electives (12 credits)

Select any four upper-division philosophy courses, two of which must be at the 400 level.

MINOR IN PHILOSOPHY

The minor in Philosophy requires 24 credits completed with a grade of "C" or higher from among the following courses.

Requirements for the Minor

Required Courses (6 credits)

PHIL.111	Logic (3)
PHIL.341	Ethics (3)

Three of the following

PHIL.221	Ancient Greek Philosophy (3)
PHIL.322	Late Classical and Medieval Philosophy (3)
PHIL.323	Late Medieval and Renaissance Philosophy (3)
PHIL.324	Modern Philosophy (3)
PHIL.325	Schools of Contemporary Philosophy (3)

Electives (9 credits)

Select nine credits of elective courses in philosophy.

Department of Political Science

Professors: BELGRAD (*Chair*), DENT, EKPO, GROSSMAN, KUMAR, MERANI

Associate Professor: MARZOTTO, RUDOLPH

Visiting Associate Professor: BOROWSKI

Visiting Assistant Professors: FRUCHTMAN, ISAACS

OFFICE

Linthicum Hall, Room 118M, (301) 321-2958

PROGRAMS OF THE DEPARTMENT

The program of courses in political science aims to promote understanding of the nature of political relationships. The Department of Political Science offers a *major and minor in Political Science*. The major prepares students for advanced study and provides the foundation for careers in public administration, law, public relations, business and research.

MAJOR IN POLITICAL SCIENCE

Thirty credit hours are required for the major in Political Science to be completed as follows:

At least three but no more than six credit hours at the lower division level.

At least 21 credit hours at the upper-division level including courses in three of the four topical areas — Comparative Politics, International Politics, American Government and Public Administration, Law and Political Theory. (Note: Courses taught under the special topic (POSC 470-479) and/or Independent Study (POSC 490) will be assigned to one of the four areas by the department or the student's advisor. This is to assure that courses taken under these two categories are not used in more than one area in order to meet the three area requirements.)

Three seminar hours from among those offered each semester. (Note: Seminar credit will not be given for Independent Study (POSC 490).

Requirements for the Major

Required Courses

At least one but no more than two of the following

POSC.101	Introduction to Political Science (3)
POSC.103	American National Government (3)
POSC.107	Introduction to International Relations (3)
POSC.137	Introduction to Comparative Politics (3)

One of the following

POSC.455	International Law and Organization I (3)
POSC.456	International Law and Organization II (3)
POSC.457	Use of Force in International Law (3)
POSC.482	Seminar in Political Science (3)
POSC.483	Seminar: Politics and the News Media (3)
POSC.484	Seminar: Politics and the Budgetary Process (3)
POSC.485	Democratic Theory Seminar (3)
POSC.486	Seminar: Justice and the Law (3)
POSC.491	Seminar in Contemporary United States Foreign Policy (3)

Electives

Twenty-one hours of electives must be taken at the upper-division level in three of the four topical areas of Political Science.

Topical Areas

The department offers courses in four topical areas: Comparative Politics, International Politics, American Government and Public

Administration, and Law and Political Theory. The numbers indicate courses that are offered in each area.

Comparative Politics. 333, 337, 338, 339, 341, 351, 470-479, 482, 490.

International Politics. 303, 307, 355, 432, 433, 435, 437, 439, 441, 445, 455, 456, 457, 465, 470-479, 482, 490, 491.

American Government and Public Administration. 207, 305, 361, 375, 381, 383, 417, 450, 451, 461, 463, 470-479, 482, 483, 484, 490, 493.

Law and Political Theory. 209, 212, 359, 418, 427, 428, 430, 470-479, 482, 485, 486, 490.

MINOR IN POLITICAL SCIENCE

Eighteen credit hours are required for the minor in Political Science to be completed as follows:

At least three but no more than six credit hours at the lower-division level.

At least 12 credit hours at the upper-division level.

Requirements for the Minor

Required Courses

At least one but no more than two of the following

- POSC.101 Introduction to Political Science (3)
- POSC.103 American National Government (3)
- POSC.107 Introduction to International Relations (3)
- POSC.137 Introduction to Comparative Politics (3)

Electives (12 credits)

Select 12 upper-division elective courses in political science.

TRANSFER CREDIT POLICY

A student who transfers to Towson State University with senior standing is expected to complete a minimum of 15 hours of upper-division political science courses at the university to satisfy the requirements for a major. Those who transfer below senior standing normally will be expected to complete 21 hours of upper-division political science courses.

Department of Psychology

Professors: BASS, BRIZZOLARA, FIGLER, FURUKAWA, MILLER, PETRI, SANDERS, SLATER

Associate Professors: ANDERSON, ARMSTRONG, GROENHEIM, JOHNSON, JOSSELSO, PARENTE, RABIN, RASKIN, SINNOTT, WALEN, WEBSTER (*Chair*)

Assistant Professors: BATESON, DICESARE, FINK, FROMAN, KRUGGEL, LAVIN, LEYHE, RAVAL, ZOLTAN-FORD, ZWEBACK

Visiting Associate Professor: COWIE, ROBINSON

Visiting Assistant Professor: WILLIAMS

OFFICE

Psychology Building, Room 200B, (301) 321-2634

PROGRAMS OF THE DEPARTMENT

The Department of Psychology offers the following programs: the *major in Psychology*; the *minor in Psychology*; and the *Clinical Concentration program for Psychology majors*.

The major in Psychology prepares students for graduate work in psychology, for training in special education and general education, for careers requiring a liberal arts background, and for work in clinical services.

MAJOR IN PSYCHOLOGY

Majors are required to complete 32 credits in Psychology with a grade of "C" or higher in each course. Of these 32 credits, 11 credits are to be completed in core courses and 21 credits are to be completed in elective courses. The elective courses must include at least one course from each of the following topical areas: "Human Development," "Clinical-Social," "Bio-psychology," and "Learning-Cognition."

Requirements for the Major

Core Courses

- PSYC.101 General Psychology (3)
- or
- PSYC.102 Honors General Psychology (3)
- PSYC.111 Behavioral Statistics (4)
- PSYC.261 Experimental Psychology (4)

Electives

Psychology majors select 21 elective credits which must include at least one course from each of the four topical areas listed below. The remaining nine elective credits may be selected from any 200, 300 or 400 level psychology courses, with the exception of PSYC.211 and PSYC.230, neither of which may be taken for major credit.

Topical Areas

Human Development

- PSYC.330 Psychology of Individual Differences (3)
- PSYC.403 Psychology of Infancy & Childhood (3)
- PSYC.404 Adolescent Psychology (3)
- PSYC.405 Psychology of Aging (3)
- PSYC.447 Sex Differences: Psychological Perspectives (3)
- PSYC.451 Introduction to the Exceptional Child (3)
- PSYC.467 Adult Psychology (3)

Clinical-Social

- PSYC.311 Behavior Modification I (3)
- PSYC.325 Social Psychology (3)
- PSYC.327 Industrial Psychology (3)
- PSYC.341 Environmental Psychology (3)
- PSYC.350 Personality (3)
- PSYC.361 Abnormal Psychology (3)
- PSYC.409 Organizational Psychology (3)
- PSYC.411 Tests and Measurements (3)
- PSYC.421 Applications of Behavioral Principles of Family and Classroom Environments (3)
- PSYC.431 Group Dynamics (3)

Biopsychology

- PSYC.317 Sensation and Perception (3)
- PSYC.460 Ethology and Comparative Psychology (3)
- PSYC.465 Physiological Psychology (3)

Learning-Cognition

- PSYC.305 Psychology of Learning (3)
- PSYC.315 Motivation (3)
- PSYC.461 Cognitive Psychology (3)

Clinical Concentration Program for Psychology Majors

The Clinical Concentration program offers training in clinical psychology leading to a B.S. degree in psychology from Towson State

University and a certificate in Mental Health from the Sheppard Pratt School of Mental Health Studies. The program provides a four-semester course sequence, beginning in the first term of the junior year. Courses are organized around practicum experience with extensive supervision so that there is unbroken continuity between theory and practice of clinical skills. This is a selective program for which students must apply by Feb. 15 of their sophomore year.

The curriculum requirements consist of three components: General University Requirements and Psychology Department requirements; two prerequisite courses which must be completed during the sophomore year and before entry into the program, Abnormal Psychology and Introduction to the Helping Relationship; and the following Clinical Concentration program courses.

SEMESTER 1

PSYC.430 Systems and Techniques of Counseling Practice (3)
PSYC.439 The Initial Interview (3)

SEMESTER 2

PSYC.453 Issues in Mental Health Intervention (2)
PSYC.454 Practicum in Psychotherapy (4)

SEMESTER 3

PSYC.431 Group Dynamics I (3)
PSYC.454 Practicum in Psychotherapy (4)

SEMESTER 4

PSYC.433 Group Psychotherapy Practicum (3)
PSYC.454 Practicum in Psychotherapy (4)

MINOR IN PSYCHOLOGY

The Psychology minor is required to complete 23 credits in psychology with a grade of "C" or higher in each course. Of these 23 credits, students must complete 11 credits in core courses, and 12 credits in elective courses which must include one course from the topical area "Learning-Cognition." The remaining nine elective credits may be selected from any of the 200, 300 or 400 level courses with the exception of PSYC.211 and PSYC.230, neither of which may be taken for minor credit.

TRANSFER CREDIT POLICY

Students entering TSU from another institution may transfer up to a maximum of 15 credits toward the major and 10 credits toward the minor in psychology upon approval by the department chair.

HONORS IN PSYCHOLOGY

The Department of Psychology seeks to give special recognition to students for academic excellence through its Honors Program. The guiding philosophy of the program is to provide the student with a specialized learning experience in both scholarly investigation and scholarly writing. The student who completes an approved program will receive a diploma with the designation Bachelor of Arts or Bachelor of Science in Honors in Psychology. Departmental honors will also appear on the student's transcript.

The program is developed for the junior and senior years and includes nine to ten credit hours in PSYC.381, PSYC.485, and PSYC.491. A colloquium presentation based on the Senior Thesis PSYC.499 is required. An honors candidate will also be required to take the Graduate Record Examination and is expected to achieve no less than the 50th percentile on the Aptitude Test (Verbal and Quantitative) and no less than the 70th percentile on the Area Specialization Test in Psychology.

To be admitted to the program a student must present an overall cumulative average of 3.25 with a cumulative average of 3.50 in Psychology. To graduate from a program the recipient of the hon-

ors degree must maintain as a minimum the afore-mentioned cumulative averages. For additional procedural details contact the department's Honors Coordinator.

MASTER OF ARTS IN PSYCHOLOGY

The Master of Arts in Psychology is designed for students who are primarily interested in an advanced degree in General Psychology, School Psychology, Clinical Psychology or Counseling. For detailed information, see the *Graduate School Catalog*.

Social Sciences Program

Advisory Committee: KAHL (*Coordinator, History*); ANDREWS (*History*); MARZOTTO (*Political Science*); SMITH (*Sociology*); SCOTT (*Geography*); KONG (*Economics*); LAWLOR (*Secondary Education*); LYONS (*Secondary Education*)

OFFICES

Linthicum Hall, Rooms 119M, 119G
Secretary: (301) 321-2924; Coordinator: (301) 321-2903

THE PROGRAM

The Social Sciences program is an interdepartmental major offering courses from the Departments of Economics, Geography, History, Political Science, Sociology and Anthropology.

The program is designed for those students who do not wish to be confined to a major in a single discipline, but are interested in a broad education, transcending traditional department boundaries. It is useful for those students who plan to enter graduate school for an advanced degree in one of the disciplines of the program; for those students who plan to enter professional schools for a degree in law, social service, or a phase of law enforcement; for those students who seek a broad background in preparation for employment in business and industry, or with a governmental agency. It is particularly designed for students planning to teach social studies at the secondary school level.

A coordinator administers the program and faculty advisors for majors are members of the Department of History. Policies and requirements for the majors in Social Science are established by an advisory committee composed of representatives from the various disciplines included in the program.

The major offers the student the choice of two Social Science programs: a Social Science major in Secondary School Education or a Social Science major in Liberal Arts.

The Bachelor of Arts degree may be earned in either Social Science program by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate course of a modern foreign language or its equivalent.

MAJOR IN SOCIAL SCIENCE

Social Science majors must complete 60 credits with a grade of "C" or higher from among the following courses. The General University Requirements must also be fulfilled.

Requirements for the Major

Required Courses (30 credits)

Two of the following

HIST.145 History of United States to Mid-Nineteenth Century (3)
HIST.146 History of United States Since Mid-Nineteenth Century (3)

- HIST.241 History of European Civilization Through Seventeenth Century (3)
 HIST.242 History of European Civilization From Seventeenth Century (3)

One of the following

- GEOG.101 Physical Geography (3)
 GEOG.102 World Regional Geography (3)
 GEOG.109 Intro. to Human Geography (3)

One of the following

- GEOG.101 Physical Geography (3)
 GEOG.102 World Regional Geography (3)
 GEOG.105 Geography of International Affairs (3)
 GEOG.109 Intro. to Human Geography (3)
 GEOG.121 Interpretation of Maps (3)
 GEOG.299 Intro. to Source Materials and Research in Geography (3)

Two of the following

- POSC.101 Intro. to Political Science (3)
 POSC.103 American National Government (3)
 POSC.107 Intro. to International Relations (3)
 POSC.137 Intro. to Comparative Politics (3)
 POSC.207 State Government (3)

All of the following

- ANTH.207 Cultural Anthropology (3)
 ECON.201 Microeconomic Principles (3)
 ECON.202 Macroeconomic Principles (3)
 SOCI.101 Introduction to Sociology (3)

Upper-Division Requirements (24 credits)

Students must complete two courses in each of four disciplines of the six disciplines in the program. At least 12 credits of upper-division courses must be taken at Towson State University.

Electives (6 credits)

Select six credits of upper- or lower-division courses in any of the six disciplines in the program.

SOCIAL SCIENCE: SECONDARY EDUCATION

Social Science majors in this Secondary Education program receive certification to teach social science at the secondary level in Maryland upon graduation. See Secondary Education Department requirements. In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 54 credits with a grade of "C" or higher from among the following courses.

Requirements for the Major

Required Courses (45 credits)

- ANTH.207 Cultural Anthropology (3)
 ECON.201 Microeconomic Principles (3)
 ECON.202 Macroeconomic Principles (3)
 GENL.401 Topics in Social Science (3)
 HIST.145 History of United States to Mid-Nineteenth Century (3)
 HIST.146 History of United States Since Mid-Nineteenth Century (3)
 HIST.241 History of European Civilization Through Seventeenth Century (3)
 HIST.242 History of European Civilization From Seventeenth Century (3)
 HIST.xxx African, Asian or Latin American History course (3)
 HIST.xxx History Course (3)
 SOCI.101 Introduction to Sociology (3)

One of the following

- GEOG.101 Physical Geography (3)
 GEOG.102 World Regional Geography (3)

- GEOG.109 Intro. to Human Geography (3)

One of the following

- GEOG.101 Physical Geography (3)
 GEOG.102 World Regional Geography (3)
 GEOG.105 Geography of International Affairs (3)
 GEOG.109 Intro. to Human Geography (3)
 GEOG.121 Interpretation of Maps (3)
 GEOG.299 Intro. to Source Materials and Research in Geography (3)

Two of the following

- POSC.101 Intro. to Political Science (3)
 POSC.103 American National Government (3)
 POSC.107 Intro. to International Relations (3)
 POSC.137 Intro. to Comparative Politics (3)
 POSC.207 State Government (3)

Electives (9 credits)

Select three additional upper-division electives from any of the disciplines in the program. The upper-division courses must be taken at Towson State University.

TRANSFER CREDIT POLICY

Transfer students in the Social Science program are required to earn at Towson State University a minimum of one-half the total number of credits required for the major.

Department of Sociology and Anthropology

Professors: GOLDBERG (Chair), HOJJATI, LEONS, ROTHSTEIN, STANLEY, TOLAND

Associate Professors: EDELSTEIN, FISHER, JONES, SEDLACK

Assistant Professors: CARSON, FRANK, SCHEPER, SMITH, WOLF

Instructor: COCKEY

OFFICE

Linthicum Hall, Room 318E, (301) 321-2852

PROGRAMS OF THE DEPARTMENT

The Department of Sociology and Anthropology offers four concentrations whose differing requirements reflect the varied nature of the professional disciplines represented. All are intended to acquaint students with methods and perspectives necessary to understand the society in which they live as well as societies with which they may have been unfamiliar. All are designed to prepare the student for entry level occupational positions, and all provide the knowledge and skill necessary for acceptance by appropriate graduate and professional schools.

For all concentrations, the Bachelor of Arts degree may be earned by adding a foreign language to the major requirements. The language requirement can be met by completing the intermediate courses of a modern language or the equivalent.

Towson State University does not offer an undergraduate program approved by the State of Maryland for certification in social work. However, many students continue their education at another university in order to obtain the Masters in Social Work degree required for higher level positions in that field.

MAJOR IN SOCIOLOGY

Students majoring in Sociology may choose from four areas of concentration: Sociology, Anthropology, Gerontology, or Corrections. The requirements for each concentration are listed below.

SPECIAL RECOMMENDATIONS FOR MAJORS

Superior students are encouraged to undertake the sequence of courses which allow for graduation with honors in the department. See the honors advisor, Dr. Jones, in your freshman or sophomore year for information.

For concentrates in Sociology, it is strongly recommended that the Statistics course (MATH.231 or PSYC.111) be taken no later than the first semester of the junior year. Most majors take Behavioral Statistics (PSYC.111).

Students interested in Law Enforcement, but desiring the major in Sociology, should consult Dr. Toland who serves as advisor.

Practicum

All majors should acquaint themselves as early as possible with the opportunities provided by the Practicum (SOCI.491 & 492; ANTH.491 & 492) for placement in agencies dealing with law enforcement and corrections, aging, family planning and counseling, social services and medical social work, alcoholism, child care and drug abuse, and other aspects of social life in the Baltimore metropolitan area. Course credit is obtained as well as familiarization with potential careers and valuable experience which enhances later job applications. A fee is assessed upon each student participating in the practicum.

Sociology Concentration

The concentration in Sociology requires 30 credits completed with a grade of "C" or higher. A minimum of 12 of the required 30 credits must be taken at Towson State University.

Required Courses

SOCI.101	Introduction to Sociology (3)
SOCI.381	Sociological Theory (3)
SOCI.391	Research Methods (3)

One of the following

MATH.231	Basic Statistics I (3)
PSYC.111	Behavioral Statistics (4)

Electives

Students must complete 18 hours of electives offered by the department, at least 12 of which must be upper-division.

Anthropology Concentration

The concentration in Anthropology requires 30 credits completed with a grade of "C" or higher. A minimum of 12 of the required 30 credits must be taken at Towson State University.

Required Courses

ANTH.207	Cultural Anthropology (3)
ANTH.208	Human Evolution & Prehistory (3)
ANTH.401	Anthropological Theory (3)

Electives

Students must complete 21 hours of electives offered in Anthropology, 15 of which must be upper-division. The following courses may be credited to the required 21 hours of electives.

SOCI.381	Sociological Theory (3)
SOCI.391	Research Methods (3)

ENGL.350	Comparative Grammar (3)
ENGL.351	Historical Linguistics (3)
ENGL.352	Structural Linguistics (3)

Gerontology Concentration

The Gerontology concentration is an interdisciplinary area of study. While the emphases of courses in sociology is on aging in a social context, attention is also directed to understanding the interaction of the social with physical and psychological aspects of the aging process. Courses in other departments such as Health and Psychology are valuable supplements to students' general understanding of the aging experience. The practicum provides the opportunity for integration of theoretical and practical concerns and familiarizes students with potential career opportunities. The course of study is designed to prepare students for employment in service-oriented agencies and organizations which are involved in research and planning for facilities, services and opportunities for the aged.

Substitution of courses in any category may be made with the permission of the program director. Students are reminded that an advanced writing course is required to fulfill the General University Requirements. Currently, none is offered as part of the Gerontology concentration. Sociological Theory (SOCI.381), Anthropological Theory (ANTH.401), Controversies in Anthropology (WRIT.361), and Introduction to Criminal Justice (WRIT.354) are available within the department; however, the student may select an advanced writing course from those *approved* in other Students are advised to take the prerequisites for the courses in the program as early as possible.

The concentration in Gerontology requires 36 credits completed with a grade of "C" or higher. A minimum of 12 of the required 36 credits must be taken in residence at Towson State University.

Required Courses

SOCI.101	Introduction to Sociology (3)
SOCI.329	Demography (3)
	<i>or</i>
SOCI.391	Research Methods (3)
SOCI.359	Social Gerontology (3)
SOCI.360	Sociology of Aging (3)
SOCI.361	The Aging Worker (3)
SOCI.367	Sociology of Death, Dying & Bereavement (3)

Students who received credit for Social Gerontology (SOCI.360) prior to Fall, 1986 will not receive credit for Sociology of Aging (SOCI.360) if taken in Fall, 1986 or later. Students who received credit for Sociology of Aging (SOCI.359) prior to Fall, 1986 will not receive credit for Social Gerontology (SOCI.359) if taken in Fall, 1986 or later.

Two of the following

EDUC.470	Special Topics in Education: Aging (3)
ENGL.471	Topics in World Literature (3)
GEOG.329	Medical Geography (3)
GEOG.407	Geography of the Aged (3)
HLTH.411	Health and Later Maturity (3)
PSYC.405	Psychology of Aging (3)
PSYC.470-79	Seminars in Psychology: Selected Topics: Psychology of Death (3)
SPPA.476	Special Topics Seminar in Speech/Language Pathology & Audiology: Aging & Communication (3)

Three of the following

SOCI.301	The Family (3)
SOCI.311	Individual and Society (3)
SOCI.313	Introduction to Social Psychology (3)
SOCI.329	Demography (if not taken before) (3)
SOCI.335	Medical Sociology (3)
SOCI.339	Community Organizations (3)
SOCI.357	Social Welfare (3)
SOCI.362	Basic Methods in Human Services Practice (3)

- SOCI.370-75 Topics in Sociology: Social Security in Action (3)
 ANTH.209 Anthropology of American Culture (3)
 or
 ANTH.211 Honors Anthropology of American Culture (3)

One of the following

- SOCI.491 Practicum in Sociology I (3)
 SOCI.492 Practicum in Sociology II (3)

Corrections Concentration

The Corrections concentration is a cross-disciplinary area of study emphasizing counseling and social service skills. Although designed for students working with prisons, probation and parole, it is also appropriate for those interested in juvenile services, social services, crisis intervention and drug treatment programs. Through courses in Sociology and Psychology, the student will learn alternative problem solving mechanisms for service and support agencies. Emphasis is placed on the social milieu of the clientele as well as on the organizations which provide the services. Courses in other departments such as Health will provide additional expertise for specific problems faced in the service agencies. Since there is concern for both the theoretical and practical aspects of interpersonal relationships and deviancy, the concentration provides job related experiences through the Practicum.

Substitutions of courses in any category may be made with permission of the chair. Students are reminded that an advanced writing course is required to fulfill Group IC of the General University Requirements. Introduction to Criminal Justice, if taken as WRIT.354, will satisfy this writing requirement for majors in the Corrections concentration. Students are advised to take the prerequisites for the courses in the program as early as possible.

The Corrections concentration requires 45 credits completed with a grade of "C" or higher. A minimum of 12 of the required 45 credits must be taken in residence at Towson State University.

Required Courses

All of the following

- SOCI.343 Minority Groups (3)
 SOCI.353 Criminology (3)
 SOCI.356 Corrections in America (3)
 SOCI.370-79 Topics in Soci.: Sociology of Law (3)
 SOCI.391 Research Methods (3)
 SOCI.491 Practicum in Sociology I (3)

One of the following

- ANTH.209 Anthropology of American Culture (3)
 or
 ANTH.211 Honors Anthropology of American Culture (3)
 SOCI.311 Individual & Society (3)
 SOCI.313 Introduction to Social Psychology (3)
 SOCI.331 Organizations (3)
 SOCI.339 Community Organization (3)
 SOCI.357 Social Welfare (3)

One of the following

- SOCI.351 Social Deviance (3)
 SOCI.354 Intro to Criminal Justice (3)
 SOCI.355 Juvenile Delinquency (3)
 SOCI.370-79 Additional Topics Courses approved by advisor (3)

Any three courses from among the following

- PSYC.205 Intro to the Helping Relationship (3)
 PSYC.429 Intro to the Counseling of Minorities (3)
 PSYC.430 Systems & Techniques of Counseling Practice (3)
 SOCI.330 Vocational Rehabilitation (3)
 SOCI.362 Basic Methods in Human Services Practice (3)
 SOCI.363 Jobs and Joblessness (3)
 SOCI.365 Issues in Youth Unemployment (3)
 SOCI.369 Group Vocational Counseling (3)

One of the following

- PSYC.350 Personality (3)
 PSYC.361 Abnormal Psychology (3)
 PSYC.404 Adolescent Psychology (3)

Three of the following with at least one in Health

- ART.461 Intro to Art Therapy I (3)
 HLTH.208 Mental Health (3)
 HLTH.221 Human Sexuality (3)
 HLTH.405 Drugs in Our Culture (3)
 POSC.305 Urban Government & Politics (3)
 POSC.375 Public Administration (3)
 POSC.401 Intro to Law (3)
 POSC.470-79 Spec. Tpcs: Women and the Law (3)
 PSYC.203 Human Development (3)
 SCED.405 Field Experience in Juvenile Institutions (3)

MINOR IN ANTHROPOLOGY

The minor in Anthropology consists of 24 hours in anthropology, at least 12 of which must be upper-division.

Required Courses

- ANTH.207 Cultural Anthropology (3)
 ANTH.208 Human Evolution & Prehistory (3)
 ANTH.401 Anthropological Theory (3)

MINOR IN SOCIOLOGY

The minor in Sociology consists of 24 hours of sociology, at least 12 of which must be upper-division.

Required Courses

- MATH.231 Basic Statistics I (3)
 or
 PSYC.111 Behavioral Statistics (4)
 SOCI.101 Introduction to Sociology (3)
 SOCI.381 Sociological Theory (3)
 SOCI.391 Research Methods

TRANSFER CREDIT POLICY

Transfer of courses from the Departments of Sociology and/or Anthropology from public colleges and universities in Maryland are routinely made. Transfers from other institutions are made upon assessment of each individual course and institution. For courses taken in departments other than those labeled Sociology or Anthropology, for which a student seeks credit, evidence as to content and qualifications of the instructor are generally required. A minimum of 12 of the required credits in each concentration must be taken at Towson State University.

GRADUATION WITH HONORS

With the support of the Lieberman Endowment, funded by Dr. & Mrs. Sidney Lieberman, the Department honors the best academic performance among graduating seniors in each of its concentrations. The outstanding student within that group receives the Lieberman Award for the most notable academic achievements for a major in the graduating class. Additional honors are bestowed for special achievement in research. Seniors are urged to consult with Dr. Jones early in their last semester before graduation.

These awards are exclusive of those granted for successful completion of the university sponsored Honors program which involves performance in a sequence of honors courses in sociology. (See section "Special Recommendations for Majors.")

SOCIOLOGY HONOR SOCIETY

Students concentrating in sociology with junior or senior status may qualify for membership in the Theta of Maryland chapter of Alpha Kappa Delta, the national honor society of sociologists. A grant from the Lieberman Endowment, funded by Dr. and Mrs. Sidney Lieberman, subsidizes student membership fees. Interested students consult Dr. Jay Stanley, faculty advisor to the chapter.







The College of Natural and Mathematical Sciences

The principal goal of the College of Natural and Mathematical Sciences is to provide students with a technological/scientific dimension to their liberal arts-based education. Courses are offered in all of the traditional physical, mathematical, and life science disciplines: Biology, Chemistry, Computer and Information Sciences, Mathematics and Physics.

"In a technological society, science is an indispensable part of the liberal arts curriculum." (D. Saxon, President Emeritus, University of California). The College of Natural and Mathematical Sciences plays an integral role in the implementation of this philosophy.

Students in the College of Natural and Mathematical Sciences may major in one of the traditional, liberal arts areas listed above. In addition, students may choose to concentrate in a variety of areas such as engineering, prepharmacy, pre-medicine, pre-dentistry, pre-veterinary medicine or molecular biology. Also, students may wish to pursue majors in the areas of science and/or mathematics teaching at either the secondary or elementary levels. The programs available in the college are traditional yet highly flexible. The departments provide quality education by professionally qualified faculty members who are dedicated to excellence in teaching and scholarship.

Donald R. Windler, Acting Dean

COLLEGE OFFICE

Smith Hall
Room 312
(301) 321-2121

College Based Pre-Professional Preparation

DUAL-DEGREE ENGINEERING PROGRAM

The objective of the Dual Degree Program at Towson State University is to provide an educational opportunity for students interested in both a "liberal science" and a professional education at the undergraduate level. Students choosing this program will be able to obtain a Bachelor of Science or Arts degree from Towson State, and a Bachelor of Engineering degree from University of Maryland at College Park. In principle, students can seek a degree in any discipline offered by Towson State; but in practice, Chemistry, Computer Science, Mathematics, and Physics are the natural choices of students interested in the Dual Degree program.

Dual degree candidates from Towson State are eligible to seek a baccalaureate degree majoring in any one of the following areas at University of Maryland:

Aerospace Engineering	Engineering Materials
Agricultural Engineering	Fire Protection
Chemical Engineering	Mechanical Engineering
Civil Engineering	Nuclear Engineering
Electrical Engineering	

In order to be eligible for transfer into the engineering program of his or her choice at University of Maryland, the student must have included in his or her work at Towson the following courses:

CHEM.101.102	General Chemistry I, II
COSC.165	Fundamentals of Computing
MATH.273, 274, 373	Calculus I, II, and III
MATH.374	Differential Equations
PHYS 241, 242, 243	Physics I, II, and III
PHYS.351, 452	Mechanics I, II
PHYS.354	Electricity and Magnetism I
	or
PHYS.352	Thermodynamics and Kinetic Theory

Students interested in Electrical Engineering are required to take PHYS.354, Electricity and Magnetism I, and PHYS.454, Electricity and Magnetism II is recommended but not required. In addition to the courses listed, students interested in Chemical Engineering are required to take CHEM.331 and 332, Organic Chemistry I, II. Students should consult the Physics Department for specific GPA requirements; normally students should maintain at least a 3.00 overall and above 3.00 in science and mathematics.

Normally after the completion of the junior year (minimum of 90 credits) at Towson State, the student transfers to the University of Maryland for approximately two additional years. Upon completion of the academic requirements for Towson State University, which should be done by the end of the first year at the University of Maryland, the student is awarded a bachelor's degree from Towson State University. The baccalaureate engineering degree in the student's area of specialization is awarded when the requirements of the University of Maryland College of Engineering are completed.

For further information, contact the Physics Department.

PRE-DENTAL AND PRE-MEDICAL REQUIREMENTS

Students who are interested in pursuing a career in medicine or dentistry should keep the following facts in mind in their undergraduate studies:

- It is difficult to gain admission to medical or dental school. Students must have an outstanding undergraduate record in order to be competitive for admission.
- Most students who enter medical school have a B.S. or B.A. degree, although a few very outstanding students are admitted to medical school with the minimum required 90 credits of university work. The same is true for dental school.
- The B.S. and B.A. degree must be in some specific discipline; there is no pre-medical or pre-dental degree at Towson State University. The B.S. or B.A. degree can be in any discipline. However, students must complete the courses required by the professional schools as described in their catalogues.
- Students interested in medical school or dental school must take the Medical College Admission Test (MCAT) or Dental Aptitude Test (DAT) one to one and one-half years in advance of entering professional school. Students must apply in advance to take these tests. Information about the tests and about applying for them can be obtained from the Pre-medical and Pre-dental Committee at Towson State University (see below).
- Medical and dental schools usually require letters of recommendation from the student's undergraduate school. At Towson State University, these letters are prepared by the Pre-medical and Predental Committee.

For further information about medical and/or dental school, the Pre-Medical and Pre-Dental Committee should be contacted as soon as possible after entering Towson State University. Call or write to the Pre-medical and Pre-dental Committee, Department of Biological Sciences, Towson State University, Towson, Maryland 21204; (301) 321-3042. Careful planning is essential.

PRE-PHARMACY REQUIREMENTS

A student planning a career in pharmacy may apply to a pharmacy school, after taking or expecting to complete a total of 60 semester hours of university credit including the required core courses. Student averages in the following four areas are evaluated: (a) overall college work, (b) required core courses, (c) chemistry courses, and (d) mathematics and physics courses. In addition, an applicant is required to take and satisfactorily pass the Pharmacy College Admission Test (PCAT) followed by personal interviews by the admission committee of the pharmacy school.

Required core courses include: six credits of English, six credits of mathematics, four credits of biology, eight credits of physics and, 16-18 credits of chemistry. The remaining credits (18-20) include elective courses such as Introduction to Sociology, Economic Principles and Problems, Public Speaking, Modern Languages, Art, Music, General Psychology, Botany, Biology and Computer Programming.

A student interested in pharmacy as a professional career should consult with the pre-pharmacy advisor in the department of chemistry upon admission to Towson State University. The student needs to plan a course program, declare an academic major, for example, chemistry, physics, mathematics, biology, since we do not have a pre-pharmacy major, and become cognizant of the specific admissions requirements of the pharmacy college that he or she plans to attend. The following recommended schedule is based upon the requirements of the University of Maryland and is typical of most pharmacy schools, with the exception that some also include in their core courses requirements, six credits of biology and three credits of economics.

The specific core course requirements are given below; these courses can be completed during the first two years of university work.

BIOL.110	Contemporary General Biology (FR) (4)
CHEM.101	General Chemistry I (FR) (4) and
CHEM.102	General Chemistry II (4)

CHEM.331	Organic Chemistry I (SO) (5) and
CHEM.332	Organic Chemistry II (5)
ENGL.102	College Writing (FR) (3)
ENGL.204	English Literature (FR) (3)
MATH.116	Mathematics II (3) or
MATH.119	Pre-Calculus (FR) (4)
MATH.273	Calculus I (FR) (4)
PHYS.211	General Physics I, II (SO) (4, 4) and (Physics 1902.241 and 1902.242 can be substituted for the above, but these two courses require Calculus)
PHYS.212	

PRE-VETERINARY REQUIREMENTS

Students planning a career in veterinary medicine should be aware of the following considerations as they prepare for admission to veterinary school:

- To be admitted to these very selective schools, students must have an outstanding record, usually with a minimum of 90 undergraduate credits.
 - Most entering veterinary students have a B.S. or B.A. degree in Biology or Chemistry, although other specific disciplines may be acceptable if basic courses in biology, chemistry, physics and math are included.
 - Although there are no specific tests required for admission to most veterinary schools, many request indications of aptitude as reflected in SAT, GRE or other standardized examinations.
 - Veterinary schools expect the applicant to have experience in aiding or assisting a veterinarian or working in adjunct fields as a volunteer or paid assistant. Varied experience is considered valuable.
 - Advising for pre-veterinary students is available through the Department of Biological Sciences. It is strongly suggested that students seek these advisory services upon entering Towson State University to maximize their career planning strategies.
- Careful planning and early contact with veterinary schools is crucial.

SCIENCE AND TECHNOLOGY

Our technological society demands an ever increasing number of highly trained technical personnel in such diverse fields as government, business and industry, medicine and other health professions, education, and public services.

Towson State is responding to these new demands by making available to students a wide variety of programs, inter-disciplinary as well as traditional. For example, students interested in careers in environmental planning may wish to combine work in the physical sciences with courses in geography, mathematics, economics, political science, and psychology. Students whose primary interest is in ecology, air and water pollution control, or conservation of natural resources may wish to combine their work in geography and environmental planning with courses in biology and chemistry. Those with primary interest in materials transport or model systems design may emphasize work in mathematics and physics in addition to their courses in environmental planning. If one is planning to work in the area of genetic engineering, a strong foundation in biology, chemistry, mathematics and physics is essential. Students interested in careers in mathematics or statistics in government or business may major in mathematics and elect other courses from areas such as computer science, the social sciences, or the physical sciences according to their interests and plans. Students wishing to enter actuarial work, would elect additional courses in economics, business administration, accounting and business law. Virtually everyone will require some familiarity with the computer.

A program, designed to meet the needs of the student is available. Advisors in each department are ready to work with you in designing *your* program.

Department of Biological Sciences

Professors: CREIGHTON, ERICKSON, FORESTER, KUNDIG, SCARBROUGH, SHOEMAKER, WINDLER (*Chair*)

Associate Professors: DAIHL, EWIG, GAZZAM, HILTON, HULL, MORSINK, PETERSON, ROBINSON, SCULLY

Assistant Professors: BUCHANAN, DENNISTON, HENRIKSON, LAINHART, LAUTERBACH, MECHLING, SHUETZ, SMOES

Assistant Instructors: BERMEL, SKINNER

OFFICE

Smith Hall, Room 341, (301) 321-3042

PROGRAMS OF THE DEPARTMENT

The Department of Biological Sciences offers the following programs of study: the *major in Biology*; the *minor in Biology*; and the *Master of Science in Biology*. For more information about the master's program consult the *Graduate School Catalog*.

A major in Biological Sciences is recommended for students interested in pursuing general careers in botany, zoology, ecology, microbiology or molecular biology. It is also recommended for individuals preparing for: graduate studies in biology; medicine, dentistry or medically oriented fields including optometry, pharmacy, podiatry or veterinary science; teacher education in secondary schools, i.e., teaching of biological or natural sciences; basic or applied research in the biological sciences; or environmental studies including conservation, wildlife biology, forestry, fisheries, pollution control, oceanography, etc.

Students selecting this major should contact the Biology Department to be assigned an advisor to assist them in designing a program to meet their special needs. Students are encouraged to meet with their advisor each semester to discuss their progress and to facilitate necessary changes in their programs of study.

MAJOR IN BIOLOGY

The Biology major requires a total of 36 biology credits with a grade of "C" or higher: 17 credits in core courses and 19 credits in electives. Additionally 21-30 credits are required in ancillary courses.

Selection of appropriate electives allows the student to fulfill the requirements for a concentration in any of nine areas of specialty: Animal Anatomy and Physiology, Biocommunications, Botany, Ecology, Marine Biology, Microbiology, Pre-medical/Pre-dentistry, Secondary School Biology and General Science Teaching, and Zoology. Completion of a concentration is not required to graduate with a Biology major.

Requirements for the Major

Core Courses (17 credits)

BIOL.201	Biology I: Cellular Biology and Genetics* (4)
BIOL.202	Biology II: Organismic and Population Biology (4)
BIOL.205	General Botany (4)

BIOL.207 General Zoology (4)
 BIOL.486 Biology Majors Seminar (1)
 *BIOL.110 or 112 with a "B" or better fulfills this requirement

Electives (19 credits)

Option I students may select their own electives from offerings within the department (see exceptions noted below) and are strongly urged to work closely with a faculty advisor in designing a program to meet their individual needs.

Option II students may select a series of courses recommended within concentrations developed by the department.

At the request of the student, completion of a concentration will be noted on his or her official transcript. Because of the diversity of career opportunities within these concentrations, a faculty advisor should be consulted before selecting a specific program of study.

A total of four credit hours in any combination from 481 Directed Reading in Biology, 491 Independent Research in Biology, 494 Travel Study, 495 Course Research, 498 Honors Research in Biology or 499 Senior Thesis in Biology may count toward the Biology major.

The following courses *MAY NOT* be used to fulfill biology elective requirements for the major in either Option I or Option II: 100 Humanistic Botany; 103 Human Biology; 171-172 Functional Human Anatomy I, II; 173 Principles of Microbiology; 295 Course Research; 301 Field Natural Science; 303 Life Science for the Elementary Teacher; 381 Biological Literature; 387 Biology in Society; 493 Internship in Biology.

Ancillary Courses (21-30 credits)

Option I Students must select from the following courses in chemistry, physics and mathematics.

Chemistry (13-18 credits)

CHEM.101-102 General Chemistry I, II (4,4)
 CHEM.330 Essentials of Organic Chemistry* (5)
or
 CHEM.331-332 Organic Chemistry I, II (5,5)

Physics (5-8 credits)

PHYS.203 Topics in Physics for Biology Majors* (5)
or
 PHYS.211-212 General Physics I, II (4,4)**

Mathematics (3-4 credits)***

One of the following

MATH.119 Pre-calculus (4)
 MATH.273 Calculus I (4)
 MATH.237 Elementary Biostatistics (4)
 PSYC.111 Behavioral Statistics (4)
 COSC.xxx Computer Science Course (3-4)
 (with the exception of COSC.101)

*Graduate schools often require two semester courses in these subjects.

**In all subsequent concentrations and course prerequisites PHYS.241-242 may be substituted for PHYS.211-212.

***Since material covered in the Basic Mathematics for the Sciences (MATH.115) is prerequisite for Chemistry and Physics, students who have not completed high school trigonometry and two years of high school algebra in good standing should take this course in addition to one of the options listed above.

Option II students must complete a specified group of ancillary courses within a concentration.

In both options General Chemistry should be taken during the freshman year, Organic Chemistry during the sophomore year and Physics as soon as possible.

ANIMAL ANATOMY AND PHYSIOLOGY CONCENTRATION

Students completing this concentration will be prepared for advanced study in anatomy and physiology or vocations requiring proficiency in these areas.

Biology Core (17 credits)

Electives (19 credits)

BIOL.213-214 Human Anatomy and Physiology I, II (4,4)
or
 BIOL.311 Functional Anatomy of Humans (4)

Select three from the following, at least one of which must be BIOL.465 or BIOL.469

BIOL.360 Histology (4)
 BIOL.367 Endocrinology (3)
 BIOL.408 Cell Biology (4)
 BIOL.463 Animal Embryology (4)
 BIOL.465 Mammalian Physiology (4)
 BIOL.469 Comparative Animal Physiology (4)
 Biology electives, if needed to complete the required 19 credits (see recommendations)

Ancillary Courses (21-30 credits)

CHEM.101-102 General Chemistry I, II (4,4)
 CHEM.330 Essentials of Organic Chemistry (5)
or
 CHEM.331-332 Organic Chemistry I, II (5,5)
 PHYS.203 Topics in Physics for Biology Majors (5)
or
 PHYS.211.212 General Physics I, II (4,4)

One of the following

MATH.119 Pre-calculus (4)
 MATH.237 Elementary Biostatistics (4)
 MATH.273 Calculus I (4)
 PSYC.111 Behavioral Statistics (4)
 COSC.xxx Computer Science course (with the exception of COSC.101) (3-4)

Recommended Courses

BIOL.318 Microbiology (4)
 BIOL.355 Animal Parasitology (4)
 BIOL.401 Genetics (4)
 BIOL.427 Neuromuscular Mechanisms of the Upper Body (2)
 CHEM.350 Principles of Biochemistry (5)

BIOCOMMUNICATIONS CONCENTRATION

This concentration is designed to prepare students to be effective spokespersons for Biology in the marketplace. Students electing this concentration may wish to secure employment in industry, government, or public relations work in which they represent their employer's biological products, services, or consumer information program.

Biology Core (17 credits)

Electives (19 credits)

BIOL.213-214 Human Anatomy and Physiology I, II (4,4)
or
 BIOL.311 Functional Anatomy of Humans (4)
 BIOL.315 Medical Microbiology (4)
or
 BIOL.318 Microbiology (4)
 BIOL.353 Invertebrate Zoology (4)
or
 BIOL.355 Animal Parasitology (4)

BIOL.381	Biological Literature (3) Advanced writing course. (Does not count in the 19 credits required)
BIOL.421	Immunology (3) Biology electives, if needed to complete the required 19 credits (see recommendations)

Ancillary Courses (21-30 credits)

Many of the following courses may also be used to fulfill General University Requirements.

CHEM.101-102	General Chemistry, I, II (4,4)
CHEM.330	Essentials of Organic Chemistry (5)
CHEM.350	Principles of Biochemistry (5)
CHEM.363	Chemistry of Dangerous Drugs (3)
PHYS.203	Topics in Physics for Biology Majors (5)

One of the following

COSC.165	Fundamentals of Computing (3)
COSC.212	Introduction to Business Programming (3)
MATH.237	Elementary Biostatistics (4)
MATH.273	Calculus I (4)
SPCH.131	Fundamentals of Speech Communications (3)
ECON.201	Microeconomic Principles (3)
GEOG.359	Economic Geography (3)

Recommended Courses

BIOL.335	Economic Botany (3)
BIOL.401	Genetics (4)
BIOL.461	Entomology (4)
MCOM.353	Publicity and Public Relations (3)

BOTANY CONCENTRATION

Background acquired in this concentration will train graduates for positions in botanically-related industry or advanced study in botany, horticulture, or forestry.

Biology Core (17 credits)

Electives (20 credits)

A minimum of 20 credits from the following courses, of which one must be from Group A, two from Group B and the remainder from Groups A, B, and C.

Group A

BIOL.436	Plant Physiology (4)
BIOL.439	Plant Anatomy (4)

Group B

BIOL.318	Microbiology (4)
BIOL.331	Plant Morphology (4)
BIOL.341	Fresh Water Algae (4)
BIOL.345	Mycology (4)
BIOL.432	Vascular Plant Taxonomy (4)

Group C

BIOL.305	Electron Microscopy (4)
BIOL.317	Microtechnique (4)
BIOL.335	Economic Botany (3)
BIOL.429	Bioanalysis (4)
BIOL.431	Horticulture (4)
BIOL.433	Plant Speciation (3)
BIOL.435	Plant Ecology (4)
BIOL.441	Plant Pathology (4)

Ancillary Courses (21-30 credits)

As in Biology Major: Option I (21-30)

Recommended Course

CHEM.350	Principles of Biochemistry (5)
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ECOLOGY CONCENTRATION

Completion of this concentration provides background for advanced study and career opportunities in environmental education, government environmental regulatory agencies and the private sector.

Biology Core (17 credits)

Electives (19 credits)

One of the following

BIOL.402	General Ecology (4)
BIOL.435	Plant Ecology (4)
BIOL.436	Plant Physiology (4)
BIOL.469	Comparative Animal Physiology (4)

A minimum of three of the following

BIOL.310	Environmental Conservation (4)
BIOL.331	Plant Morphology (4)
BIOL.341	Fresh Water Algae (4)
BIOL.351	Field and Systematic Vertebrate Zoology (4)
BIOL.353	Invertebrate Zoology (4)
BIOL.371	Animal Behavior (4)
BIOL.401	Genetics (4)
BIOL.404	Ecological Techniques (3)
BIOL.406	Limnology (4)
BIOL.411	Wildlife Biology (4)
BIOL.413	Evolution (3)
BIOL.432	Vascular Plant Taxonomy (4)
BIOL.433	Plant Speciation (3)
BIOL.456	Ornithology (4)
BIOL.458	Mammalogy (4)
BIOL.461	Entomology (4)
BIOL.467	Herpetology (4)
	Biology electives, if needed, to complete the required 19 credits

Ancillary Courses (21-30 credits)

Chemistry and Physics requirements as in Biology Major:

Option I (18-26)

MATH.237	Elementary Biostatistics (4)
	or
PSYC.111	Behavioral Statistics (4)

Recommended Courses

MATH.273	Calculus I (4)
CHEM.350	Principles of Biochemistry (5)

MARINE BIOLOGY TRACK

This track provides background for advanced study in the marine sciences. It also offers training appropriate for a career in private or public agencies which are concerned with aquatic environments.

Biology Core (17 credits)

Electives (21-23 credits)

Required Biology Elective

BIOL.347	Marine Biology (3)
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A minimum of four courses selected from the following

BIOL.349	Marine Botany (4)
BIOL.351	Field and Systematic Vertebrate Zoology (4)
BIOL.353	Invertebrate Zoology (4)

BIOL.389	Current Developments in Biology (3) (When focusing on a marine-related topic)
BIOL.406	Limnology (4)

Required Marine Experience

An intensive field and/or laboratory experience in the area of Marine Biology. Such an experience will normally involve a summer course at a marine research facility. The Biology Department has a current list of approved courses and programs. All experiences must be approved in advance. (3-4)

Recommended Courses

BIOL.401	Genetics (4)
BIOL.402	General Ecology (4)
BIOL.436	Plant Physiology (4)
BIOL.469	Comparative Animal Physiology (4)

Ancillary Courses (18-26 credits)

Chemistry and Physics requirements as in Biology Major: Option I (18-26)

One of the following

MATH.237	Elementary Biostatistics (4)
MATH.273	Calculus I (4)
PSYC.111	Behavioral Statistics (4)

Recommended Courses

CHEM.350	Principles of Biochemistry (5)
PHSC.121	Physical Geology (4)
PHSC.123	Historical Geology (3)
PHSC.443	Sedimentology and Sedimentary Petrology (3)

MICROBIOLOGY CONCENTRATION

This concentration will provide knowledge of the characteristics of microorganisms and the laboratory skills necessary for isolation, cultivation, and identification of microorganisms and the evaluation of microbiological data. Careers in microbiology are available in food technology, pharmaceutical production, fermentation industries, agriculture, medical laboratories, water quality control, and basic research. Completion of this concentration will qualify students for registry as microbiologists with the Federal Civil Service and the American Academy of Microbiology.

Biology Core (17 credits)

Electives (20 credits)

BIOL.315	Medical Microbiology (4) or
BIOL.318	Microbiology (4)
BIOL.401	Genetics (4)

A minimum of 12 credits selected from the following

BIOL.305	Electron Microscopy (4)
BIOL.317	Microtechnique (4)
BIOL.341	Freshwater Algae (4)
BIOL.345	Mycology (4)
BIOL.355	Animal Parasitology (4)
BIOL.403	Advanced Genetics (3)
BIOL.408	Cell Biology (4)
BIOL.421	Immunology (3)
BIOL.428	Virology (3)
BIOL.485	Seminar in Microbiology and Cell Biology (1)

Ancillary Courses (27-35 credits)

CHEM.101-102	General Chemistry I, II (4,4)
CHEM.330	Essentials of Organic Chemistry (5) or
CHEM.331-332	Organic Chemistry I, II (5,5)
CHEM.350	Principles of Biochemistry (5)

PHYS.203	Topics in Physics for Biology Majors (5) or
PHYS.211-212	General Physics I, II (4,4)
MATH.119	Pre-calculus (4) or
MATH.273	Calculus I (4)

Recommended Courses

BIOL.213-214	Human Anatomy and Physiology I, II (8)
BIOL.311	Functional Anatomy of Humans (4)
HLTH.311	Chronic and Communicable Diseases (3)
MATH.237	Elementary Biostatistics (4)
CHEM.210	Principles and Methods of Chemical Analysis (4)
CHEM.341	Physical Chemistry — Thermodynamics (3)
CHEM.342	Physical Chemistry — Structure & Kinetics (3)

PRE-MEDICINE/PRE-DENTISTRY CONCENTRATION

Students planning to enter medical or dental school should select this concentration. It is also recommended for those interested in medically related fields such as osteopathy, podiatry and optometry.

Biology Core (17 credits)

Electives (19-20 credits)

BIOL.213-214	Human Anatomy and Physiology I, II (4,4)
BIOL.401	Genetics (4)
BIOL.408	Cell Biology (4)

A minimum of one of the following

BIOL.360	Histology (4)
BIOL.463	Animal Embryology (4)
BIOL.465	Mammalian Physiology (4)

Ancillary Courses (29-30 credits)

CHEM.101-102	General Chemistry (4,4)
CHEM.331-332	Organic Chemistry I, II (5,5)
PHYS.211-212	General Physics I, II (4,4)

One of the following

MATH.119	Pre-calculus (4)
MATH.237	Elementary Biostatistics (4)
MATH.273	Calculus I (4)
PSYC.111	Behavioral Statistics (4)
COSC.xxx	Computer Science Course (with the exception of COSC.101) (3-4)

Recommended Courses

BIOL.315	Medical Microbiology (4)
CHEM.350	Principles of Biochemistry (5)

SECONDARY SCHOOL BIOLOGY AND GENERAL SCIENCE TEACHING CONCENTRATION

Students who complete this concentration and the required courses in the Secondary Education Department will meet certification requirements to teach secondary school biology and general science in at least 33 states including Maryland. Students must register with the Department of Secondary Education and should have an advisor in that department in addition to their Biology advisor.

Biology Core (17 credits)

Electives (19-20 credits)

BIOL.213-214	Human Anatomy and Physiology I, II (4,4)
	or
BIOL.311	Functional Anatomy of Humans (4)
<i>Two of the following</i>	
BIOL.310	Environmental Conservation (4)
BIOL.401	Genetics (4)
BIOL.431	Horticulture (4)
	Biology electives, if needed, to complete 19 credits (see recommendations)

Ancillary Courses (24-25 credits)

CHEM.101-102	General Chemistry I, II (4,4)
CHEM.330	Essentials of Organic Chemistry (5)
PHYS.211-212	General Physics I, II (4,4)

One of the following

MATH.119	Pre-Calculus (4)
MATH.273	Calculus I (4)
COSC.165	Fundamentals of Computing (3)
COSC.212	Introduction to Business Programming (3)

Recommended Courses

BIOL.315	Medical Microbiology (4)
BIOL.318	Microbiology (4)
BIOL.461	Entomology (4)

ZOOLOGY CONCENTRATION

This concentration is recommended for individuals preparing for careers and/or advanced study in vertebrate zoology, invertebrate zoology, entomology, wildlife biology or fisheries biology.

Biology Core (17 credits)

Electives (19-20 credits)

BIOL.469	Comparative Animal Physiology (4)
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A minimum of four courses from the following, at least one of which must be selected from Group A and one from Group B:

Group A

BIOL.371	Animal Behavior (4)
BIOL.402	General Ecology (4)
BIOL.411	Wildlife Biology (4)
BIOL.413	Evolution (3)

Group B

BIOL.351	Field and Systematic Vertebrate Zoology (4)
BIOL.353	Invertebrate Zoology (4)
BIOL.355	Animal Parasitology (4)
BIOL.456	Ornithology (4)
BIOL.458	Mammalogy (4)
BIOL.461	Entomology (4)
BIOL.467	Herpetology (4)

Ancillary Courses (21-30 credits)

Chemistry and Physics requirements as in Biology major: Option I (18-26)

One of the following

MATH.237	Elementary Biostatistics (4)
PSYC.111	Behavioral Statistics (4)
COSC.xxx	Computer Science (with the exception of COSC.101) (3-4)

Recommended Courses

MATH.273	Calculus I (4)
CHEM.350	Principles of Biochemistry (5)

MINOR IN BIOLOGY

To fulfill the requirements of a Biology minor, students must complete the following courses. A minimum of 12 hours of the biology

credits applied toward the minor must be earned at Towson State University.

Biology Requirements (24 credits)

BIOL.110	Contemporary General Biology (4)
BIOL.205	General Botany (4)
BIOL.207	General Zoology (4)
BIOL.xxx	Upper Division Biology courses (12)

The following courses MAY NOT be used to fulfill this requirement: 301 Field Natural Science; 303 Life Science for the Elementary Teacher; 387 Biology in Society; 481 Directed Readings in Biology; 491 Independent Research; 494 Travel Study; 495 Course Research

Ancillary Courses (8 credits)

CHEM.101-102	General Chemistry I, II (4,4)
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BIOLOGY SELECTIONS PROVIDING CERTIFICATION AS MIDDLE SCHOOL AND HIGH SCHOOL BIOLOGY TEACHER

Students who complete the following list of courses as well as the professional education courses required by the Department of Secondary Education will meet the requirements for Maryland state certification as a Middle School Science Teacher and High School Biology Instructor.

Biology Requirements (24-28 credits)

BIOL.110	Contemporary General Biology (4)
BIOL.205	General Botany (4)
BIOL.207	General Zoology (4)
BIOL.213-214	Human Anatomy and Physiology I, II (4,4)
	or
BIOL.311	Functional Anatomy of Humans (4)

Two of the following

BIOL.310	Environmental Conservation (4)
BIOL.401	Genetics (4)
BIOL.431	Horticulture (4)

Recommended Course

BIOL.358	Invertebrate Zoology (4)
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Ancillary Courses (19 credits)

CHEM.101-102	General Chemistry I, II (4,4)
PHYS.211-212	General Physics I, II (4,4)
MATH.115	Basic Mathematics for the Sciences (3)

NATURAL SCIENCE MAJOR

The Natural Science major provides several interdisciplinary concentrations designed either to give a broad view of the sciences, or to provide for specialization in the earth sciences. The concentrations are: general science, environmental science, earth science, and geology. For detailed information about this major see the description under the Department of Physics.

MOLECULAR BIOLOGY

The rapidly expanding field of molecular biology offers many opportunities in industry and research. Students may obtain excellent preparation in molecular biology by following the track in Molecular Biology described in this *Catalog* under General/Liberal Studies. Faculty in the Biology and Chemistry departments are available to advise students interested in this program.

ANIMAL BEHAVIOR

The study of Animal Behavior has become of increasing interest to the public, and requires a broad array of skills for those who are interested in this field. Students may receive this background by following the interdisciplinary program described under the Animal Behavior thematic option in the General/Liberal Studies section of this *Catalog*. Faculty in the Biology and Psychology departments are available to advise students interested in this program.

TRANSFER CREDIT POLICY

The Biology Department accepts credit toward the Biology major from other accredited colleges and universities. However, a minimum of 18 hours of biology credits applied toward the major must be earned at Towson State University. Additionally, there are equivalency exams available for all the major biology core courses, as well as several others. The Biology Department should be contacted to determine equivalency of specific transfer credits.

HONORS PROGRAM

To graduate with honors in biology a student must complete BIOL.498 and BIOL.499 to be taken in consecutive semesters of the senior year. The research thesis must be presented in an oral defense before the honors research committee. An oral presentation open to the public is also required. In addition, a minimum of three credit hours must be selected from BIOL.491 and/or BIOL.481 in the junior year. For eligibility and general information consult the College Honors Program description.

GRADUATE PROGRAM

The course of study leading to the Master of Science in Biology is designed to provide greater knowledge and understanding of biology and to help the student develop a proficiency in independent thought, inquiry and research. The student may pursue either the Thesis Program (30 credits and a thesis) or the Non-Thesis Program (36 credits). Detailed information regarding both programs is given in the *Graduate School Catalog*.

Department of Chemistry

Professors: KASK, LARKIN, SWEETING, TOPPING,
WINGROVE

Associate Professors: BLANKENSHIP, CARET, DEBYE (*Chair*)
MILIO, RAWN, YARBROUGH

Assistant Professors: EVERETT, PREISLER, PRIBULA

OFFICE

Smith Hall, Room 547, (301) 321-3058

PROGRAMS OF THE DEPARTMENT

The Department of Chemistry offers the following programs: the *major in Chemistry*; the *American Chemical Society Accredited Degree in Chemistry*; the *Chemistry Secondary Education program*, for students planning to teach chemistry at the secondary level; and the *minor in Chemistry*.

To offer the broadest possible service and to meet the needs of a full range of students at the university, the Chemistry major provides a strong background in all major areas of chemistry: physical chemistry, inorganic chemistry, organic chemistry, biochemistry, analytical chemistry, and instrumental analysis. Stu-

dents are given the opportunity to concentrate in one or more of these areas during their senior year by taking advanced courses in areas of specific interest. Emphasis is placed upon the role of instrumentation in an experimental science, and students are required to learn to use instruments commonly encountered in chemistry. Small-sized classes are prevalent in all Chemistry courses, and students are taught by qualified faculty in both lecture and laboratory. Special topics courses are offered periodically in order to provide students with the opportunity to obtain a diverse background in chemistry.

Chemistry majors are able to pursue many different avenues upon graduation, including graduate school in chemistry and related areas, employment in government or industry, professional school (medicine, dentistry, pharmacy, and so forth), or secondary school teaching. There are many diverse employment opportunities available to Chemistry majors, including those in water pollution, forensic chemistry, environmental chemistry, molecular biology, research and quality assurance, genetic engineering, and so forth. Students planning careers in industry are encouraged to take courses in business and finance as part of their undergraduate program.

Evening Chemistry Major Program

The Chemistry Department offers a six-year program which permits students to take all Chemistry courses required for the Chemistry major at night. Contact the Department of Chemistry for further information and long range schedule of course offerings.

MAJOR IN CHEMISTRY

This major is recommended for students who intend to do graduate work in chemistry, to teach in secondary schools, to work in industrial, government and hospital laboratories, technical libraries, and related professions. Students who plan chemically-oriented careers such as fundamental and industrial research, medicine, dentistry, pharmacy, veterinary medicine, agriculture, and other allied fields, may also elect this major. Students electing the major should contact the Chemistry Department and be assigned advisors to assist them in designing programs to meet their special needs. Students should see a Chemistry faculty advisor early in their time at Towson State University and upon occasion of any change in courses or schedule in their program.

For those who intend to go to graduate school in chemistry at least two post-physical chemistry courses and two semesters of German or Russian are strongly recommended. Additional physics and mathematics courses are also recommended, especially COSC.165 and/or MATH.471. (See ACS Certification.)

The major in Chemistry requires a total of 63 credits completed in chemistry and supporting courses. Majors must also complete the General University Requirements. The abbreviations following the titles of courses indicate the recommended year in which the course should be taken.

Requirements for the Major

Required Courses (63 credits)

MATH.273	Calculus I (FR) (4)
MATH.274	Calculus II (SO) (4)
PHYS.241	General Physics I (SO) (4) (or PHYS.211 but this is not recommended and is not allowed for the ACS certified degree)
PHYS.242	General Physics II (SO) (4) (or PHYS.212 but this is not recommended and is not allowed for the ACS certified degree)
CHEM.101	General Chemistry I (FR) (4)
CHEM.102	General Chemistry II (FR) (4)
CHEM.211	Quantitative Analytical Chemistry (SO) (5)
CHEM.331	Organic Chemistry I (SO) (5)

CHEM.332	Organic Chemistry II (JR) (5)
CHEM.342	Physical Chemistry-Structure & Kinetics (SO) (3)
CHEM.341	Physical Chemistry-Thermodynamics (JR) (3)
CHEM.343	Physical Chemistry Laboratory I (JR) (2)
CHEM.344	Physical Chemistry Laboratory II (JR) (2)
CHEM.355	Biochemistry (JR) (3)
CHEM.423	Inorganic Chemistry (JR) (3)
CHEM.356	Biochemistry Laboratory (JR) (2)
	or
CHEM.424	Inorganic Chemistry Laboratory (JR) (2)
CHEM.413	Theory of Instrumental Analysis (SR) (3)
CHEM.415	Instrumental Analysis Laboratory (SR) (2)
CHEM.401	Seminar in Chemistry (SR) (1)

AMERICAN CHEMICAL SOCIETY ACCREDITED DEGREE (ACS CERTIFICATION)

The department offers an American Chemical Society (ACS) accredited degree. The ACS degree is widely recognized throughout the industry, government and education as a standard of excellence. Students with a good scholastic record are therefore urged to take this degree program.

To obtain an ACS accredited degree a student must complete the following additional program of study: CHEM.491 must be taken plus at least *two* courses selected from the following advanced chemistry courses: CHEM.417, CHEM.431, CHEM.432, CHEM.441, CHEM.452, CHEM.453. Students who take *both* CHEM.356 (Biochemistry Laboratory) *and* CHEM.424 (Inorganic Chemistry Laboratory) may use one of them as an advanced chemistry course for the ACS accredited degree. Students who have taken General Physics without calculus (PHYS.211 and PHYS.212) may count these courses for ACS certification *provided* an additional advanced physics lecture course is taken; consult the Chemistry Department for information about suitable physics courses. An advanced course in either physics or mathematics may be substituted for one advanced course in chemistry (excluding CHEM.491). A student selecting this substitution must obtain *prior* departmental approval.

In selecting this program, students should plan their college careers carefully as not all the advanced chemistry courses are offered every semester. A tentative schedule of when these courses will be offered may be obtained from the Chemistry Department. Advanced chemistry electives are offered periodically, subject to adequate enrollment.

Research in Chemistry

To satisfy one of the requirements for the ACS Certified Degree, students must take CHEM.491, Introduction to Research in Chemistry. Students interested in taking this course must first see the Coordinator of Undergraduate Research who will assist the student in finding a research project of interest. The student's performance will be evaluated by the research director and two other faculty members selected by the research director. Normally, students should have the following before attempting CHEM.491: an overall GPA of 2.50 or better; a GPA of 2.50 or better in all courses taken in the College of Natural and Mathematical Sciences; CHEM.211 and CHEM.332; consent of instructor and of Coordinator of Undergraduate Research.

CHEMISTRY SECONDARY EDUCATION PROGRAM

Chemistry majors may obtain certification to teach chemistry at the secondary level. Students in the Secondary Education program receive certification to teach in Maryland upon graduation.

Students must complete the requirements for the Chemistry major plus BIOL.110. Additionally, students must meet the requirements specified by the Department of Secondary Education.

Students must register with the Department of Secondary Education, and should have an advisor in that department in addition to their chemistry faculty advisor.

MINOR IN CHEMISTRY

Students whose major interest is in cell or molecular biology, physiology, physiological psychology, environmental studies, natural science, molecular physics or medical technology will find a good chemistry background to be a useful adjunct to their major. The Chemistry minor can provide this background and offers some flexibility in catering to the specific interests of the student.

Students should consult the Chemistry minor advisor as soon as possible after entering Towson State in order to design programs to meet their special needs.

Requirements for the Minor

The minor in Chemistry requires a minimum of 24 credits in chemistry, 12 of which must be upper-division. At least eight upper-division credits must be taken at Towson State. A grade of "C" or better must be earned in each course. Courses taken elsewhere and accepted for transfer to Towson State University may be used for the Chemistry minor. Clinical Chemistry taken in the Medical Technology program may count as two upper-division credits.

Required Courses (24 credits)

CHEM.101	General Chemistry I (4)
CHEM.102	General Chemistry II (4)
CHEM.210	Principles and Methods of Chemical Analysis (4)
	or
CHEM.211	Quantitative Analytical Chemistry (5)
CHEM.330	Essentials of Organic Chemistry (5)
	or
CHEM.331	Organic Chemistry I (5)
	and
CHEM.332	Organic Chemistry II (5)

Upper-Division Chemistry Electives

In addition to the above required courses, one or more upper division Chemistry courses may have to be taken to make a *total* of 12 upper-division credits. The following courses are recommended as being of potential interest to Chemistry minors, but other upperdivision chemistry courses may be counted if they are approved in advance by the Chemistry Minor advisor.

CHEM.340	Physical Chemistry: Principles and Applications (3)
CHEM.341	Physical Chemistry — Thermodynamics (3)
CHEM.342	Physical Chemistry — Structure and Kinetics (3)
CHEM.343	Physical Chemistry Laboratory I (2)
CHEM.350	Principles of Biochemistry (5)
CHEM.361	Chemical and Bacteriological Studies of Water Pollution (3)
CHEM.363	Chemistry of Dangerous Drugs (3)
CHEM.367	Forensic Chemistry (3)

Clinical Chemistry taken in the Medical Technology program may count as two upper-division credits.

INTERDISCIPLINARY PROGRAMS

Molecular Biology Track

The rapidly expanding field of molecular biology offers many opportunities in industry and research. Students may obtain excellent preparation in molecular biology by following the track in Molecular Biology described in this *Catalog* under General/Liberal Studies. Faculty in the Biology and Chemistry Departments are available to advise students interested in this program.

Natural Science Major

The Natural Science major provides several interdisciplinary concentrations designed either to give a broad view of the sciences, or to provide for specialization in the earth sciences. The concentrations are: general science, environmental science, earth science, and geology. For detailed information about this major see description under the Department of Physics.

Dual-Degree Program in Engineering

A student may obtain a bachelor's degree with a major in Chemistry from Towson State University and a degree in Engineering from the University of Maryland at College Park as part of a joint program. This program is described in the College of Natural and Mathematical Sciences' Pre-Professional Preparation area of this *Catalog*. Further information may be obtained from the Physics Department.

Pre-Medical, Pre-Dental, and Pre-Pharmacy Requirements

Students majoring in Chemistry must also complete certain pre-professional requirements for admission to Medical, Dental, or Pharmacy school; see the College of Natural and Mathematical Sciences' Pre-Professional Preparation area of this *Catalog* for further information about admission requirements for Medical, Dental, or Pharmacy school. Pre-Medical and Pre-Dental students should contact the Pre-Medical/Pre-Dental Committee for assistance with their applications, advice about pre-professional courses, and letters of recommendation. For admission requirements and advice about pre-professional courses for Pharmacy school, contact the Pre-Pharmacy advisor, Professor Frank Milio, in the Chemistry Department.

TRANSFER CREDIT POLICY

Students who transfer to Towson State University from a regionally accredited two-year or four-year college should have completed two semesters of General Chemistry, two semesters of Organic Chemistry, two semesters of Calculus, and two semesters of calculus-based Physics in order to ensure completion of the Chemistry major in a total of four years of college. Transfer students should consult the Chemistry Department concerning the transferability of chemistry courses other than the ones mentioned above.

Students must complete at least 12 upper-division credits in chemistry at Towson State in order to graduate with a degree in Chemistry. CHEM.331 and CHEM.332, Organic Chemistry I and II, MAY NOT be counted as part of these upper-division credits.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The Department of Chemistry awards credit for General Chemistry through the Advanced Placement Examinations given by the Educational Testing Service.

Students may also receive credit for General Chemistry by taking the Credit for Prior Learning examination which is administered through the College of Continuing Studies. Students may also receive credit for other chemistry courses by passing the appropriate examinations. Further information may be obtained from the Department.

DEPARTMENT AND COLLEGE MERIT SCHOLARSHIPS

Department and College Merit Scholarships are awarded on an annual basis. Further information regarding these opportunities may be obtained from the Chemistry Department.

COOPERATIVE EDUCATION

Chemistry majors are encouraged to participate in the Cooperative Education Program and receive academic credit for practical work experience in areas of special student interest. Academic credit can be acquired by taking CHEM.395, Practicum in Chemistry. For further information, contact the Department of Chemistry and/or the Internship/Cooperative Education Office.

DEPARTMENTAL ACTIVITIES AND AWARDS

Most Chemistry majors actively participate in the Student Affiliates of the American Chemical Society, which is a student group supported by the department under the auspices of the American Chemical Society. This organization permits students to join the national organization and to procure certain chemistry publications at reduced rates.

Several awards are given each year to outstanding chemistry students and majors and include the following: Outstanding Freshman Chemistry award, Outstanding Organic Chemistry award, Outstanding Analytical Chemistry award, the Maryland Section of the American Chemical Society award. In addition, Undergraduate Research Participation awards are given on a competitive basis by the university to provide support for research.

Department of Computer and Information Sciences

Professors: BEHFOROOZ, DALPHIN (Chair), GRANT, KIM

Associate Professors: LIDTKE, LITTLE, SRIVASTAVA

Assistant Professors: ALEXANDER, DAVANI, HEDAYATI, HINMAN, HUDSON, JAVADI, JOYCE, LAWSON, MORRISON, RIGGLEMAN, ROBINSON, SCHMITT, SMITH, THIESS, VonSUMPTER

OFFICE

Cook Library, Room 400C, (301) 321-2633

PROGRAMS OF THE DEPARTMENT

The Department of Computer and Information Sciences offers the following programs of study: the *major in Computer Science*; the *major in Computer Science with a concentration in Information Systems*; the *minor in Computer Science*. It is also possible to complete a combined major in Computer Science and Mathematics; see the details listed in the Mathematics section of this catalog.

The Computer Science major offers students an opportunity to study for both a theoretical and practical background, which can lead to computer-oriented careers in a variety of settings. Students will receive an excellent foundation for jobs such as computer programmer/analyst, management information systems specialist, systems analyst, systems programmer, or computer specialist in such industry areas as aerospace, telecommunications and other high technology domains. Students are encouraged to combine their studies in computer science with other areas such as business, education, or any of the sciences; computer expertise combined with knowledge in an adjunct area often is attractive to specific employers. Students benefit from use of a wide variety of equipment and applied experiences. The major also prepares students for graduate work in computer sciences or management information systems.

The curriculum seeks to provide factual knowledge as well as

a mode of thinking which permits continued growth on the part of graduates. Thus, in addition to exposing students to a depth of knowledge in computer science sufficient to lay the basis for professional competence, the program also provides students with the intellectual maturity to stay abreast of their own discipline and to interact with other disciplines.

PRE-MAJOR REQUIREMENTS

Criteria for admission to the Computer Science major are based on student category as outlined below:

- A. Freshmen must have one of the following:
 - 1) an SAT total (combined score) of 1100 or higher
 - 2) an advanced placement score in computer science of "3" or better
 - 3) satisfactory completion of one year of calculus with a grade of "C" or better
- B. Community college transfer students must have an A.A. degree in Computer Science with a 3.00 cumulative average on a 4.00 scale in the major.
- C. Official second bachelor's degree candidates are automatically eligible to major in Computer Science.
- D. Other students must have taken the following courses:
Calculus I (MATH.273) or its equivalent with a grade of "C" or better and Structured Programming (COSC.236) or its equivalent with a grade of "B" or better.

Students who feel that they have met similar criteria through other courses or experiences may petition the department for admission.

MAJOR IN COMPUTER SCIENCE

The computer science major requires 50 credits to be earned with a grade of "C" or higher.

Requirements for the Major

Core Courses (32 credits)

COSC.236	Structured Programming (3)
COSC.280	Assembly Language Programming (3)
COSC.336	Data Structures and Sorting Techniques (3)
COSC.338	Computer Organization (3)
COSC.339	Operating System Principles (3)
COSC.355	Survey of Programming Languages (3)
COSC.437	File and Data Structures (3)
MATH.263	Discrete Mathematics (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)

Electives (18 credits)

Three upper-division computer science courses not included in the core courses and

Three of the following

MATH.264	Discrete Mathematics II (3)
MATH.330	Introduction to Statistical Methods (4)
MATH.331	Probability (3)
MATH.332	Mathematical Statistics (3)
MATH.361	Algebraic Structures (4)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.374	Differential Equations (3)
MATH.377	Mathematical Models (3)
MATH.435	Numerical Analysis I (3)
MATH.436	Numerical Analysis II (3)
MATH.437	Operations Research (3)
PHYS.337	Digital Electronics (4)
PHYS.437	Microprocessor-Based Systems (3)

Information Systems Concentration

Students majoring in Computer Science may complete a concentration in Information Systems, emphasizing the application of computers in business settings. Students must complete the 32 credits of core courses required for the Computer Science major, and 18 credits of required courses for the concentration.

Core Courses (32 credits as stated above)

Required Courses (18 credits)

COSC.335	Advanced Business Programming (3)
COSC.411	Systems and Design (3)
COSC.457	Database Management Systems (3)
ACCT.201	Accounting Principles I (3)
ACCT.202	Accounting Principles II (3)
	One upper-division course in the School of Business & Economics (3)

MINOR IN COMPUTER SCIENCE

All Computer Science minors are required to take 18 semester hours in computer science, of which 12 hours must be upper-division. Numerical Analysis I and II (MATH.435 and MATH.436) may be counted toward a Computer Science Minor.

MEETING GENERAL UNIVERSITY REQUIREMENTS

While any computer and information sciences course will satisfy General University Requirements, several introductory courses are designed to meet this need. COSC.101 (Computers and Society) is an overview of the capabilities of computers and their applications with emphasis on societal issues created by their use. It includes computer demonstration and some limited laboratory experiences. COSC.115 (Introduction to Information Systems) is a broad overview of the information processing industry, with extensive microcomputer laboratory projects from business. It includes some elementary programming using BASIC. COSC.165 (Fundamentals of Computing) is an in-depth computer programming course in BASIC using microcomputers. It includes development of algorithms and extensive laboratory work.

TRANSFER CREDIT POLICY

Students intending to transfer into the Computer Science program should provide course descriptions and supportive materials from their institution for review by a departmental advisor. Community college students from local public institutions should be aware that agreements on equivalency of courses are maintained; they should inquire about the current agreement either at their institution or at Towson State University. They should also be aware that community college courses can only be counted as lower-division work. Transfer students are urged to gain a good background in mathematics. Refer to screening procedures, above, for further information.

SECOND BACHELOR'S PROGRAM

Baccalaureate degree holders may apply for enrollment in the second bachelor's program through the College of Continuing Studies. Because of the high demand for computer personnel, the Computer Science major is often of interest to persons who wish to change careers. Students in this program must satisfy the requirements for the major and earn at least the last 30 hours at Towson State University. Although there are computer science courses offered in the evening, students may find that some required courses must be taken during the day. Because of the se-

quence of prerequisites, a minimum of five terms is normally needed to complete the program.

DEPARTMENTAL ACTIVITIES AND AWARDS

A student chapter of the Association for Computing Machinery (ACM) is the basis for the Computer Science Club. The Mary Hudson Scarborough Award in science is given annually to the outstanding Computer Science graduate.

Department of Mathematics

Professors: HANSON, HORAK (*Chair*), KIM, SIEGEL

Associate Professors: HASTE, MAY

Assistant Professors: CHEN, CHOLLET, COUGHLIN, FISCHER, GHAHRAMANI, ILGENFRITZ, JONES, KAPLON, KRACH, MORRISON, RICHMAN, RUTENBERGS, SOHRAB, STERN, WAGNER

Visiting Assistant Professor: GROSSMAN

Instructor: ROSE

OFFICE

Stephens Hall Annex

PROGRAMS OF THE DEPARTMENT

The mathematics curriculum provides opportunities for students to do abstract reasoning applicable to many scientific or academic areas, to survey the field of mathematics, to study the applications of the discipline, and to prepare for additional study or for a career.

The Department of Mathematics offers the following programs: the *major in Mathematics*; the *Mathematics Secondary Education program*, for students who wish to be certified to teach mathematics in secondary schools; the *minor in Mathematics*, designed to enhance major programs to which mathematics is readily applied; the *minor in Mathematics with the Elementary Education major*, for prospective elementary teachers who may wish to teach mathematics at the middle school or junior high school level; and the *second major programs* offered with the Departments of Economics, Marketing, Management, and Computer and Information Sciences.

The Mathematics major has several areas of concentration from which to choose. The Pure Mathematics concentration emphasizes abstract mathematics and provides the courses required for graduate study in mathematics. For students interested in the actuarial profession there is an Actuarial Science concentration which provides the necessary background required for entry-level positions in that field. The Applied Mathematics concentration and the Applied Mathematics and Computing concentration are designed for students who wish to apply mathematics to problems in business and industry.

The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate course of a modern foreign language or its equivalent.

MATHEMATICS SECONDARY EDUCATION PROGRAM

Mathematics majors in this Secondary Education program receive certification upon graduation to teach mathematics at the second-

ary level in Maryland. Students in this program should student teach in their senior year. Any student who wishes to deviate from this policy must obtain permission from the Department of Mathematics prior to the beginning of his or her junior year. Secondary Education majors who plan to teach at the high school level are advised to take MATH.365 Linear Algebra and MATH.373 Calculus III. Consult the Secondary Education Department section in this *Catalog* for additional course requirements for prospective secondary school teachers.

In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 72 credits with a grade of "C" or higher from among the following courses.

Requirements for the Major

Required Courses (32 credits)

COSC.236	Structured Programming (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.353	Elementary Geometry from an Advanced Standpoint (3)
MATH.361	Algebraic Structures (4)
MATH.423	Teaching Mathematics in Secondary Schools (3)
PHYS.241-242	General Physics I and II (4,4)

Upper-Division Required Courses (12 credits)

Students must take enough upper-division Mathematics courses to make a total of 30 hours in mathematics. MATH.423 may not be counted in this 30 hours. At most, one upper-division computer science course may be counted towards these 30 hours.

Education Courses (28 credits)

EDUC.401	Foundations of Education (3)
ISTC.269	Laboratory in Instructional Hardware (1)
PSYC.201	Educational Psychology (3)
SCED.341	Prin. of Secondary Education (3)
SCED.390	Student Teaching in Secondary Schools (12)
SCED.460	Teaching Reading in the Secondary School (3)
SPED.301	Introduction to Special Education (3)

MAJOR IN MATHEMATICS

Mathematics majors may choose from the following areas of concentration: Pure Mathematics, Actuarial Science, Applied Mathematics, and Applied Mathematics and Computing. Students must complete the General University Requirements in addition to the requirements for each concentration.

PURE MATHEMATICS CONCENTRATION

This concentration requires 47-53 credits completed with a grade of "C" or higher.

Required Courses (29 credits)

COSC.236	Structured Programming (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.361	Algebraic Structures (4)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.473	Introductory Real Analysis (4)

Two courses from among: PHYS.241, PHYS.242, BIOL.401, MNGT.363, ECON.451, GEOG.375, SOCI.391, PHYS.337, PHYS.437, COSC.417, COSC.461, COSC.471 with the restriction that at most one of these courses may be selected from among: BIOL.401, MNGT.363, GEOG.375 and SOCI.391. (6-8)

Upper-Division Mathematics Courses (12-16 credits)

Students must complete 4 additional upper-division mathematics courses.

ACTUARIAL SCIENCE CONCENTRATION

The Actuarial Science concentration requires 60-61 credits completed with a grade of "C" or higher.

Required Courses (57 credits)

ACCT.201, 202	Accounting Principles I and II (6)
COSC.236	Structured Programming (3)
ECON.201-202	Microeconomic and Macroeconomic Principles (6)
FIN.331	Financial Management (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.331	Probability (3)
MATH.332	Mathematical Statistics (3)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.377	Mathematical Models (3)
MATH.435-436	Numerical Analysis I and II (6)
MKTG.223	Life Insurance (3)

One course from among MATH.374, MATH.361, MATH.451, MATH.473, MATH.475, MATH.484-489 (3-4)

One of the following

ENGL.313	Advanced Composition (3)
ENGL.317	Writing for Business and Industry (3)

APPLIED MATHEMATICS CONCENTRATION

The Applied Mathematics concentration requires 45-49 credits completed with a grade of "C" or higher.

Required Courses (21 credits)

COSC.236	Structured Programming (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)

Electives

Two courses from among MATH.331, MATH.332, MATH.435, MATH.436 (6)

Two courses from among MATH.377, MATH.451, MATH.374 (6)

One course from among MATH.353, MATH.357, MATH.361, MATH.367, MATH.457 (3-4)

One course from among MATH.461, MATH.473, MATH.475, MATH.477 (3-4)

Two courses from among PHYS.241, PHYS.242, BIOL.401, MNGT.363, ECON.451, GEOG.375, SOCI.391, PHYS.337, PHYS.437, COSC.417, COSC.461, COSC.471 with the restriction that at most one of these courses may be selected from among: BIOL.401, MNGT.363, GEOG.375 and SOCI.391. (6-8)

APPLIED MATHEMATICS AND COMPUTING CONCENTRATION

The Applied Mathematics and Computing concentration requires 51-56 credits completed with a grade of "C" or higher.

Required Courses (24 credits)

COSC.236	Structured Programming (3)
COSC.336	Data Structures and Sorting Techniques (3)

MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)

Two courses from among: PHYS.241, PHYS.242, BIOL.401, MNGT.363, ECON.451, GEOG.375, SOCI.391, PHYS.337, PHYS.437, COSC.417, COSC.461, COSC.471 with the restriction that at most one of these courses may be selected from among: BIOL.401, MNGT.363, GEOG.375 and SOCI.391. (6-8)

Three courses from among MATH.330, MATH.331, MATH.332, MATH.377, MATH.435, MATH.436 (9-10)

One course from among MATH.361, MATH.374, MATH.451 (3-4)

One course from among MATH.461, MATH.473, MATH.475, MATH.477 (3-4)

Two courses from among COSC.280, COSC.338, COSC.355, COSC.367, COSC.457 (6)

SECOND MAJOR PROGRAMS

A student may declare a second major and obtain a degree which certifies that both majors have been completed. The Mathematics Department encourages majors to pursue a second major or a minor in subjects in which mathematics is applied. In cooperation with the Economics, Marketing, Management, and Computer & Information Sciences Departments the following courses of study have been developed to enable a student to obtain a second major in economics, business or computer science.

Mathematics Major with a Second Major in Economics

The Mathematics major with the second major in Economics requires 60-62 credits completed with a grade of "C" or higher.

Required Courses (48 credits)

COSC.165	Fundamentals of Computing (3)
ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
ECON.309	Intermediate Price Theory (3)
ECON.313	Money and Banking (3)
ECON.310	Macroeconomic Theory (3)
ECON.451	Introduction to Mathematical Economics (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.331	Probability (3)
MATH.332	Mathematical Statistics (3)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.377	Mathematical Models (3)

One course from among COSC.306, MATH.374, MATH.435, MATH.451, (3)

One course from among MATH.353, MATH.357, MATH.361, MATH.367, MATH.436, MATH.457 (3-4)

One course from among MATH.461, MATH.473, MATH.457, MATH.477 (3-4)

And one additional course to be chosen in Economics (3)

Courses recommended are MATH.374, MATH.435, MATH.436, ECON.337, ECON.401, ECON.410 and ECON.421.

Mathematics Major with a Second Major in Business

The Mathematics major with the second major in Business requires 78-83 credits completed with a grade of "C" or higher.

Required Courses (60 credits)

ACCT.201	Accounting Principles I (3)
ACCT.202	Accounting Principles II (3)

ACCT.225	Business Law I (3)
COSC.165	Fundamentals of Computing (3)
COSC.236	Structured Programming (3)
ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
FIN.331	Financial Management (3)
MATH.263	Discrete Mathematics (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.331	Probability (3)
MATH.332	Mathematical Statistics (3)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.377	Mathematical Models (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
MNGT.363	Quantitative Methods for Business I (3)

Two courses from among MATH.361, MATH.374, MATH.435, MATH.451, MATH.473, COSC.367 (6-8)

Completion of one of the concentrations required for the Business Administration major (12-15)

Mathematics Major with a Second Major in Computer Science

The Mathematics major with the second major in Computer Science requires 60-63 credits completed with a grade of "C" or higher.

Required Courses (45 credits)

COSC.236	Structured Programming (3)
COSC.280	Assembly Language Programming (3)
COSC.336	Data Structures (3)
COSC.338	Computer Organization (3)
COSC.339	Operating Systems (3)
COSC.355	Survey of Programming Languages (3)
COSC.367	Discrete Structures (3)
COSC.437	File and Data Structures (3)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)
MATH.365	Linear Algebra (3)
MATH.373	Calculus III (4)
MATH.435	Numerical Analysis I (3)

Three courses from among MATH.330, MATH.331, MATH.361, MATH.374, MATH.377, MATH.436, MATH.451, MATH.473, MATH.475 (9-12)

Any two upper-division courses in computer science except COSC.003 (6)

MINOR IN MATHEMATICS

The Minor in Mathematics requires 20 credits completed with a grade of "C" or higher. The minor requires the three courses listed below, plus at least 9 upper-division credits in mathematics (excluding MATH.321, MATH.323, MATH.325, and MATH.423).

Required Courses (11 credits)

MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)

Electives (9 credits)

Students must complete nine credits of upper-division electives in mathematics (excluding MATH.321, MATH.323, MATH.325, and MATH.423).

ELEMENTARY EDUCATION MAJOR WITH THE MATHEMATICS MINOR

Elementary Education majors who complete a Mathematics minor will be certified to teach junior high school mathematics as well

as elementary school mathematics. Special student teaching assignments are available so that the student will get experience in teaching mathematics in addition to the regular elementary experience. Students in this program should be advised by the chair of the Elementary Education Department and by a member of the Mathematics Department.

The Minor in Mathematics for the Elementary Education Major requires 23 credits completed with a grade of "C" or higher. Students must also complete requirements for their major as specified by the Department of Elementary Education.

The minor requires the five courses listed below, plus at least six credits of upper-division electives in mathematics (at most one of the courses MATH.321, MATH.323, MATH.325, MATH.423 may be counted).

Required Courses (17-18 credits)

MATH.204	Concepts of Mathematics for Elementary Teachers I (3)
MATH.231	Basic Statistics I (3)
	or
MATH.237	Elementary Biostatistics (4)
MATH.263	Discrete Mathematics I (3)
MATH.273	Calculus I (4)
MATH.274	Calculus II (4)

Electives (6 credits)

Students must complete six credits of upper-division electives in mathematics where at most one of MATH.321, MATH.323, MATH.325, or MATH.423 may be counted.

DUAL-DEGREE ENGINEERING PROGRAM

Refer to College's Pre-Professional Preparation area of this Catalog.

COURSE PREREQUISITES

The Department strictly enforces prerequisites for all mathematics courses.

TRANSFER STUDENT POLICIES

If a student submits mathematics credits which are more than ten years old at the time of admission or readmission, the chair, after reviewing these records, may ask that some courses be repeated or that new courses be substituted.

Secondary Education Mathematics majors are required to take MATH.423 and at least three upper-division courses of their Mathematics major program at Towson State University.

Arts and science mathematics majors are required to take at least four upper-division courses of their mathematics major programs at Towson State University.

Mathematics minors must take at least three courses of their mathematics minor program at Towson State University; at least two of these courses must be upper-division.

NOTES FOR MAJORS AND MINORS

Arts and science mathematics majors with minors in economics may substitute ECON.451 for the physics requirement.

Mathematics majors or minors who receive a grade of "D" in a 100 level course prerequisite to calculus must repeat the course no later than concurrent with calculus.

Mathematics majors or minors must attain a grade of "C" in any 200, 300 or 400 level course used as a prerequisite or applied towards a major or minor. Unless otherwise noted, prerequisites must be satisfied prior to taking a course.

The program of the minor should be approved by the student's mathematics department advisor. (A minor in mathematics enables a student to meet the subject-matter requirements for a Maryland secondary school teacher's certificate to teach mathematics.)

MEETING GENERAL UNIVERSITY REQUIREMENTS

Each student should consult those portions of this *Catalog* describing his major and minor programs to see whether specific mathematics courses are required or recommended.

For most majors, any level mathematics course, except as noted and MATH.291, may be used to satisfy the Group IV, General University Requirement. Students, however, should enroll in the mathematics course for which they have the necessary high school or collegiate background.

MATH.111 is a course designed specifically for students majoring in business, economics, psychology, or the social sciences, and satisfies Group IV, General University Requirements.

MATH.115, 116, or 119, are courses designed specifically for students majoring in mathematics, computer science, and the natural or biological sciences, and satisfy Group IV, General University Requirements.

MATH.204 and MATH.205 are courses designed specifically for students majoring in elementary or early childhood education. These courses satisfy the Group IV General University Requirements.

MATHEMATICS COURSE NUMBERS

A note on the numbering system: the left digit of the course number indicates the level of the content. The middle digit of the course number indicates the area of the content; zero-general; 1-service; 2-mathematics education; 3-probability and statistics; 4-numerical analysis; 5-geometry; 6-algebra; 7-analysis; 9-readings, special topics, and seminars in mathematics.

Department of Physics

Professors: HUANG, LOH (*Chair*), MOLITOR, NEWMAN, PELHAM, UKENS

Associate Professors: BATES, CHEN, JOHNSON, LARSEN

Assistant Professors: GREENE, KRAUSE, KREISEL, NOORI, WESSNER

OFFICE

Smith Hall, Room 445, (301) 321-3020, 321-3021

PROGRAMS OF THE DEPARTMENT

The Physics Department offers the following programs: the *General Concentration in Physics*; the *Applied Concentration in Physics*; the *Teaching Concentration in Physics*, for students planning to teach physics; the *Physics-Engineering Dual Degree Program*, offered in cooperation with the University of Maryland School of Engineering; the *minor in Physics*; and the *major in Natural Science* which includes concentrations in geology, earth science, general science, and environmental science.

MAJOR IN PHYSICS

The Physics Department offers an undergraduate program leading to a Bachelor of Science or Arts degree in Physics. This program is divided into two main concentrations designed to give the greatest possible flexibility as preparation for graduate study in physics, astrophysics, medicine, engineering or other allied fields and for professional practice as a physicist in industrial, governmental or institutional laboratories.

In order to provide students a broad and solid base in physics and also to provide the flexibility which enables the student to take courses in areas where physics can be applied, all Physics majors take a series of basic physics core courses. The first courses are General Physics I, II and III (PHYS.241, 242 and 243). They provide an introduction to both classical and modern physics. The junior and senior core physics courses treat classical and modern physics in greater depth.

It is recommended that those who intend to pursue graduate studies in Physics take the General Physics Concentration as well as additional physics electives and mathematics courses. Those who intend to participate in fundamental or applied research and development in industrial or government laboratories are encouraged to take the Applied Physics Concentration and other physics electives. Recommended mathematics electives are: Calculus III, Numerical Analysis I, Numerical Analysis II and Differential Equations.

Students may wish to elect some foreign language also as preparation for graduate study. Students may also supplement the core program of study by participation in a guided independent study and/or ongoing research project. A combination of well-grounded preparation in fundamentals plus the availability of an individually tailored program of study is designed to optimize the student's preparation for graduate school or a professional career. In addition to physics courses, all majors are required to complete courses in computer science, mathematics and chemistry.

Students who intend to major in Physics should contact the Physics Department in order to be assigned a faculty advisor. The faculty advisor will assist students in planning a program which will meet their special needs and is also available for advising on career opportunities and employment. Physics majors are required to complete 16, and minors 8, of the required upper-division credits in physics at this university. Students should be aware that most advanced physics courses (300 and 400 level) may be offered in either the first semester or the second semester, but not in both semesters. Some physics electives are only offered every other year. Advisors will have information on the courses offered and on the schedules.

Students *must* see their advisor no later than the time of their matriculation for the third semester in general physics which is normally the beginning of the spring semester of their sophomore year. The student, after consultation with his or her advisor, will propose a tentative plan for completing all graduation requirements including those for the major. This selection of electives for the various concentrations must be approved by their advisor. The plan may be modified from time to time, but the modification must be approved by the major advisor.

Students may also organize an individualized course of studies. This gives the students the option to select a plan which reflects their interest in a special area of physics. The array of courses must have internal coherence and be *approved* by the major advisor.

Physics Honors Program

The Physics Department offers an honors program for students with superior scholarship in Physics. The honors program is designed to provide exceptional students with maximum opportunity for intensive study of physics at an advanced level. Students with demonstrated ability will be invited by the department to participate in this program. Such students will work closely with faculty members and will participate in an individualized program of research, directed readings, and independent studies. Students who complete an approved program will receive a diploma with the designation of Bachelor of Arts or Bachelor of Science with Honors, and Departmental Honors will also appear on the transcript.

Edward I. Rubendall Physics Achievement Awards

The awards were established in Honor of Professor Emeritus Rubendall by friends of the department. The awards are presented annually to outstanding juniors and seniors majoring in Physics.

Requirements for the Major

The major in Physics requires 54-55 credits completed with a grade of "C" or higher. The General University Requirements must also be completed.

Required Physics Core Courses (31 credits)

PHYS.241, 242 & 243	General Physics I, II, III (4,4,3)
PHYS.307	Introductory Mathematical Physics (3)
PHYS.311	Modern Physics (4)
PHYS.341-342	Intermediate Physics Laboratory I, II (3,3)
PHYS.351	Mechanics I (3)
PHYS.354	Electricity and Magnetism I (3)
PHYS.485	Physics Seminar I (1)

Non-Physics Requirements (23-24 credits)

CHEM.101-102	General Chemistry I, II (4,4)
COSC.165	Fundamentals of Computing or equivalent (3)
MATH.273-274	Calculus I, II (4,4)
MATH.xxx	Upper-Division Mathematics course (3-4)

Requirements for the General Track in Physics

All required courses in this track must be completed with a grade of "C" or higher. The General University Requirements must be completed. The Physics core courses and the non-physics requirements must be completed as well as the following courses:

Advanced Physics Courses (14 credits)

PHYS.455	Quantum Mechanics (3)
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Two courses from among the following (6)

PHYS.352	Thermodynamics and Kinetic Theory (3)
PHYS.451	Mechanics II (3)
PHYS.454	Electricity and Magnetism II (3)
PHYS.457	Solid State Physics (3)
PHYS.459	Nuclear Physics (3)

Five credits of physics electives

Recommended Physics Electives

PHYS.335	Basic Electronics (4)
PHYS.352	Thermodynamics and Kinetic Theory (3)
PHYS.361	Optics Fundamentals (4)
PHYS.370	Selected Topics in Contemporary Astrophysics (3)
PHYS.421	Fundamental Particles (3)
*PHYS.451	Mechanics II (3)
PHYS.453	Physical Optics (3)
*PHYS.454	Electricity and Magnetism II (3)
PHYS.457	Solid State Physics (3)
PHYS.459	Nuclear Physics (3)

*Highly recommended for students planning to attend graduate school.

Required Courses for Applied Track in Physics

All required courses in this track must be completed with a grade of "C" or higher. The General University Requirements must be completed. The Physics core courses and the non-physics requirements must be completed as well as the following courses:

Advanced Physics Courses (14 credits)

PHYS.361	Optics Fundamentals (4)
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One course from

PHYS.335	Basic Electronics (4)
PHYS.337	Digital Electronics (4)
PHYS.437	Introduction to Microprocessor-Based Digital Systems (3)

One course from

PHYS.453	Physical Optics (3)
PHYS.457	Solid State Physics (3)

Three or four credits of physics electives

Recommended Physics Electives

PHYS.335	Basic Electronics (4)
PHYS.337	Digital Electronics (4)
PHYS.352	Thermodynamics and Kinetic Theory (3)
PHYS.435	Electronics (3)
PHYS.437	Introduction to Microprocessor-Based Digital Systems (3)
PHYS.445	Lasers and Holography (3)
PHYS.453	Physical Optics (3)
PHYS.455	Quantum Mechanics (3)
PHYS.457	Solid State Physics (3)
PHYS.459	Nuclear Physics (3)
PHYS.461	Electro-Optics (4)

PHYSICS SECONDARY EDUCATION PROGRAM

The Physics Department offers a Physics Secondary Education program that leads to a Bachelor of Science or Arts degree in Physics. This program is designed for those students who plan to teach Physics at the secondary level.

In addition to the General University Requirements, and the requirements specified by the Department of Secondary Education, students must complete 31 credits in physics courses and 19 credits in non-physics courses. All courses required for the major must be completed with a grade of "C" or higher.

Requirements for the Major**Physics Core Courses (31 credits)****Non-Physics Requirements (19 credits)**

CHEM.101-102	General Chemistry I, II (4,4)
COSC.165	Fundamentals of Computing (3)
MATH.273-274	Calculus I, II (4,4)

Required Secondary Education Courses (29-32 credits)

EDUC.401	Foundations of Education (2)
PSYC.201	Educational Psychology (3)
SCED.341	Principles of Secondary Education* (3)
SCED.399	Differentiated Student Teaching Secondary (12)
SCIE.380	Teaching Science in the Secondary School* (3)
SCIE.421	Field Course in Secondary Science Teaching Methods** (2)
SCED.460	Teaching Reading in Secondary School (3)
SPED.301	Introduction to Special Education (3)

*Must be taken prior to student teaching.

**To be taken concurrent with student teaching.

Suggested Course Schedules for Majors

By its very nature, physics is more hierarchical in its course structure than typical humanities or social science disciplines. Therefore, many courses depend heavily on prerequisite courses (such as calculus and general physics). Any time which is required to prepare for calculus (MATH 115) must be added to the four year minimum. Normally, progress in mathematics and general physics is the pacesetter.

Suggested Course Schedule for the General Concentration in Physics

Freshman Year

FIRST SEMESTER (14 credits)

CHEM.101	Chemistry I (4)
ENGL.102	College Writing (3)
	Electives (3)
MATH.273	Calculus I (4)

SECOND SEMESTER (15 credits)

CHEM.102	Chemistry II (4)
COSC.165	Fundamentals of Computing (3)
MATH.274	Calculus II (4)
PHYS.241	General Physics I (4)

Sophomore Year

FIRST SEMESTER (14-15 credits)

MATH.xxx	Upper-Division Math Elective (3/4)
	Electives (7)
PHYS.242	General Physics II (4)

SECOND SEMESTER (15 credits)

PHYS.243	General Physics III (3)
PHYS.307	Introductory Mathematical Physics (3)
PHYS.xxx	Physics Elective (3)
	Electives (6)

Junior Year

FIRST SEMESTER (16 credits)

PHYS.311	Modern Physics (4)
PHYS.341	Intermediate Physics Laboratory I (3)
PHYS.351	Mechanics I (3)
	Electives (6)

SECOND SEMESTER (15 credits)

PHYS.342	Intermediate Physics Laboratory II (3)
PHYS.354	Electricity and Magnetism I (3)
PHYS.xxx	Physics Elective* (3)
	Electives (6)

Senior Year

FIRST SEMESTER (16 credits)

PHYS.455	Introductory Quantum Mechanics (3)
PHYS.485	Physics Seminar (1)
PHYS.xxx	Physics Elective (3)
	Second Writing course (3)
	Electives (6)

SECOND SEMESTER (15 credits)

PHYS.xxx	Physics Elective (5)
	Physics and Other Electives (10)

Suggested Course Schedule for the Applied Track in Physics

Freshman Year

FIRST SEMESTER (14 credits)

CHEM.101	Chemistry I (4)
ENGL.102	College Writing (3)
	Electives (3)
MATH.273	Calculus I (4)

SECOND SEMESTER (15 credits)

CHEM.102	Chemistry II (4)
COSC.165	Fundamentals of Computing (3)
MATH.274	Calculus II (4)
PHYS.241	General Physics I (4)

Sophomore Year

FIRST SEMESTER (14-15 credits)

PHYS.242	General Physics II (4)
MATH.xxx	Upper-division Math Elective (3/4)
	Electives (7)

SECOND SEMESTER (13 credits)

PHYS.243	General Physics III (3)
PHYS.307	Introductory Mathematical Physics (3)
PHYS.3xx	300 level Electronics Elective (4)
	Electives (3)

Junior Year

FIRST SEMESTER (16 credits)

PHYS.311	Modern Physics (4)
PHYS.341	Intermediate Physics Laboratory I (3)
PHYS.351	Mechanics I (3)
	Electives (6)

SECOND SEMESTER (15 credits)

PHYS.342	Intermediate Physics Laboratory II (3)
PHYS.354	Electricity and Magnetism I (3)
PHYS.361	Optics Fundamentals (3)
	Electives (6)

Senior Year

FIRST SEMESTER (16 credits)

PHYS.485	Physics Seminar (1)
PHYS.xxx	Physics Electives (6)
	Second Writing Course (3)
	Electives (6)

SECOND SEMESTER (15 credits)

PHYS.xxx	Physics Electives (5)
	Physics and Other Electives (10)

Suggested Course Schedule for the Physics Secondary Education Major

Physics Teaching Majors are not required to take any physics electives but are encouraged to take as much physics and mathematics as possible.

For recommended course schedule contact the Physics Department.

MINOR IN PHYSICS

An important aspect of the overall contribution of physics is its impact on other disciplines. This program is designed to provide majors in any of the sciences, mathematics, business, or humanities with a background in physics which will broaden their understanding and enhance their career opportunities. This program requires the student to complete the following courses.

Required Courses (24 credits)

PHYS.241,242 & 243	General Physics I, II, III (4,4,3)
PHYS.311	Modern Physics (4)
PHYS.xxx	Upper-division physics courses (9)

Students interested in the Physics minor program should consult the Physics Minor Advisor as soon as possible in order to design a program to meet their special needs.

To provide greater flexibility in selecting electives, students may organize their course of studies to supplement their major programs and/or reflect their special interests. The array of courses should have internal coherence and must be approved by their major advisor.

The minor in Physics requires a minimum of 24 credits in physics. At least 8 upper-division credits must be taken at Towson State. A grade of "C" or better must be earned in each course.

DUAL-DEGREE ENGINEERING PROGRAM

The Dual-Degree Engineering Program offers a student the opportunity to obtain a Bachelor of Science or Arts in Physics and an Engineering degree from University of Maryland at College Park. Physics has traditionally been an important part of the curriculum for engineers, and many engineering programs (Electrical, Nuclear Engineering, and others) grew out of physics departments. Completion of the physics program at Towson State, complemented by the engineering education, will provide the student a foundation in the fundamentals that allows him or her to meet the challenges of future technologies. Dual Degree candidates from Towson State are eligible to seek a baccalaureate degree majoring in any one of the following areas at University of Maryland, College Park:

Aerospace Engineering	Engineering Materials
Agricultural Engineering	Fire Protection
Chemical Engineering	Mechanical Engineering
Civil Engineering	Nuclear Engineering
Electrical Engineering	

In order to be eligible for transfer into the engineering program of his or her choice at the University of Maryland, the student must have included in his or her work at Towson the following courses: CHEM.101, 102; COSC.165; MATH.273, 274, 373, 471; and PHYS.241, 242, 243, 351, 451, and 352 or 354. Normally students must maintain a GPA of at least 3.00 overall and above 3.00 in science and mathematics. Students should consult the Department on specific GPA requirements.

After completing the Physics degree requirements of Towson State University (normally by the end of the first year at the University of Maryland), the student will receive a Bachelor's degree in Physics from Towson State University. The baccalaureate engineering degree in the student's area of specialization will be awarded when the requirements in the College of Engineering are completed.

For further information contact the Physics Department.

MAJOR IN NATURAL SCIENCE

The Natural Science Major offers four interdisciplinary concentrations designed to give a broad view of the sciences, or to provide specialization in the Earth Sciences. The concentrations available are: Geology, Earth Science, General Science, and Environmental Science.

Students who plan geology related careers, graduate school in the geological sciences, or secondary school earth science teaching should consider this major with a Geology concentration. Students interested in this concentration should see Dr. Molitor early in their education at this university.

Prospective secondary or middle school teachers of Earth Science are advised to select the Earth Science concentration, while those who intend to teach General Science may find the interdisciplinary General Science concentration more suited to their needs. Students planning on teaching careers need to plan their programs to meet state certification requirements and should have an advisor in the Secondary Education Department as well as a science advisor.

The Environmental Science concentration is the most interdisciplinary of the concentrations available. It provides not only for a broad background in the sciences but also includes opportunities to work in the areas of health sciences and geography.

Students selecting the Natural Science major should be aware that the interdisciplinary nature of the program necessitates many

lower-division course credits. In order to meet the university requirement of 32 upper-division credits some upper-division credits may be earned outside the major.

Students should also be aware that the requirements for entrance into graduate programs in a science might not be met by any of the concentrations *except* Geology.

A minimum of 50 percent of the credits applied toward completion of a concentration must be taken at Towson State University.

Students selecting concentrations in Earth Science, General Science, or Environmental Science should see Dr. Greene early in their education at this university.

Requirements for the Major

The following core courses are required for all concentrations in the Natural Science major. Students in the Geology concentration may substitute MATH.274, Calculus II, or MATH.231, Basic Statistics I, for COSC.165 Fundamentals of Computing.

Core Courses (36-37 credits)

BIOL.201-202	Biology I, II (4,4)
	<i>or</i>
BIOL.110	Contemporary General Biology (4) and either
BIOL.205	General Botany (4)
	<i>or</i>
BIOL.207	General Zoology (4)
CHEM.101-102	General Chemistry I, II (4,4)
PHYS.211-212	General Physics I, II (4,4)
	<i>or</i>
PHYS.241-242	General Physics, I, II (4,4)
PHSC.121	Physical Geology (4)
	<i>or</i>
BIOL.301	Field Natural Science (Environmental Science concentration only) (4)
PHSC.123	Historical Geology (3)
	<i>or</i>
PHSC.323	Geomorphology (4)
	<i>or</i>
BIOL.301	Field Natural Science (General Science concentration only) (4)
	<i>or</i>
BIOL.402	General Ecology (Environmental Science concentration only) (4)
COSC.165	Fundamentals of Computing (3)
BIOL.491	Independent Research in Biology (2-3)
	<i>or</i>
PHSC.401	Advanced Laboratory in Physical Science (2)
	<i>or</i>
CHEM.391	Special Problems in Chemistry (1-3)
	<i>or</i>
CHEM.395	Practicum in Chemistry (1-3)

Geology Concentration

The Geology concentration requires 18-21 credits (in addition to the core courses) completed with a grade of "C" or higher. Students complete five upper-division geology courses or four such courses and one of the following.

BIOL.307	Introduction to Paleontology (4)
CHEM.210	Principles and Methods of Chemical Analysis (5)
CHEM.340	Physical Chemistry: Principles and Applications (4)
GEOG.321	Interpretation of Aerial Photographs (3)

Earth Science Track

The Earth Science track requires 22 credits (in addition to the core courses) completed with a grade of "C" or higher.

Required Courses (10 credits)

BIOL.301	Field Natural Science (4)
GEOG.373	Climatology (3)
	or
GEOG.337	Descriptive Meteorology (3)
PHSC.161	Astronomy I (3)

Electives (12 credits)

Twelve elective credits should be chosen from the following

GEOG.373	Applied Climatology (3)
	or
GEOG.377	Descriptive Meteorology (if not taken as required above) (3)
GEOG.321	Interpretation of Aerial Photographs (3)
GEOG.411	Studies in Environmental Hazards (2)
	Any upper-division geology course
PHSC.361	Astronomy II (3)

General Science Track

The General Science track requires 23 credits (in addition to the core courses) completed with a grade of "C" or higher.

Required Courses (11 credits)

BIOL.213-214	Human Anatomy and Physiology I, II (4,4)
PHSC.161	Astronomy I (3)

Electives (12 credits)

Any upper-division courses in the biological and/or physical sciences (Chemistry, Physics, Geology, and Astronomy) and/or geography (no more than 6 credits from the geography courses listed under the Earth Science Concentration).

Environmental Science Concentration

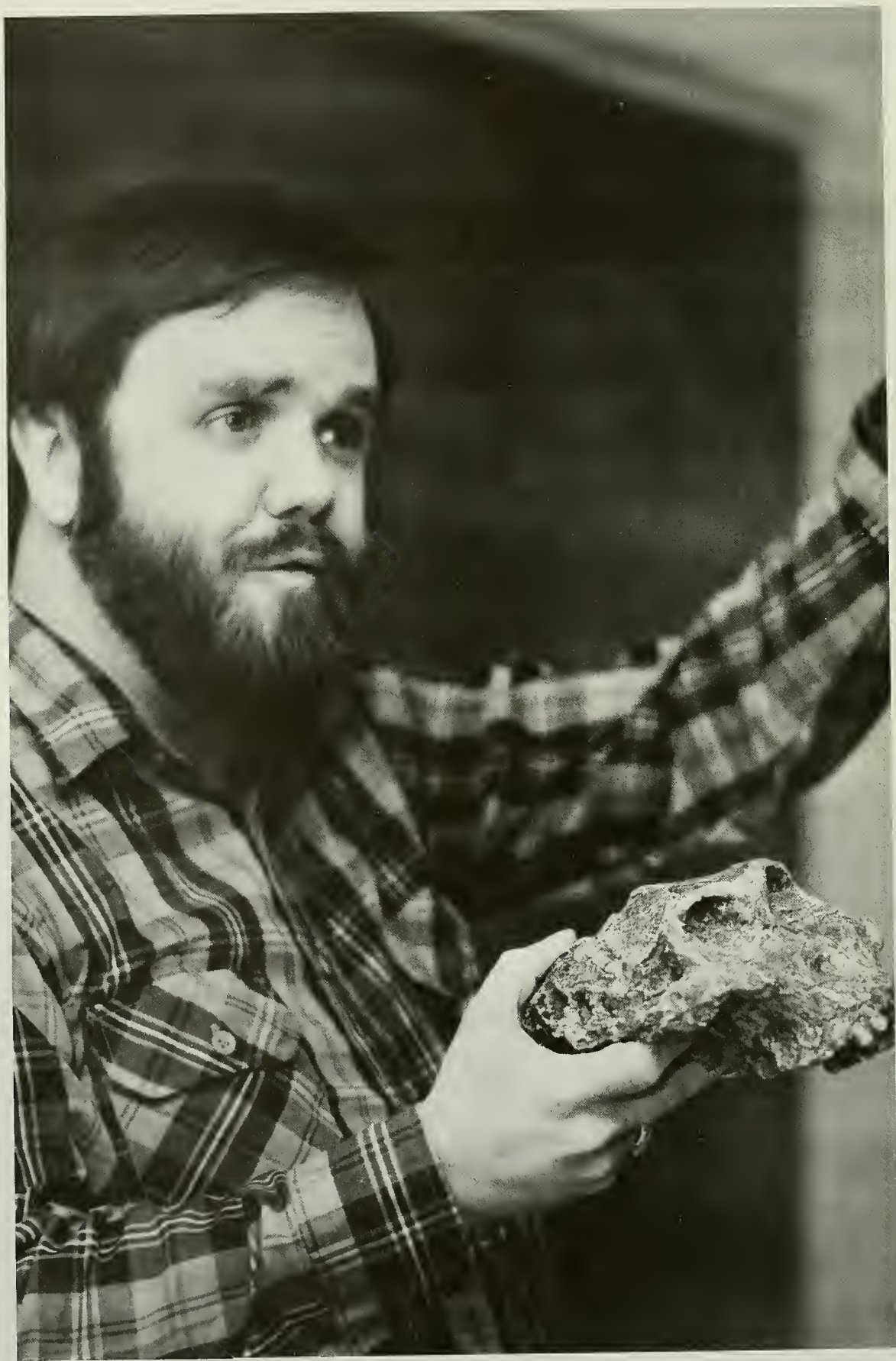
The Environmental Science concentration requires 22 credits (in addition to the core courses) completed with a grade of "C" or higher.

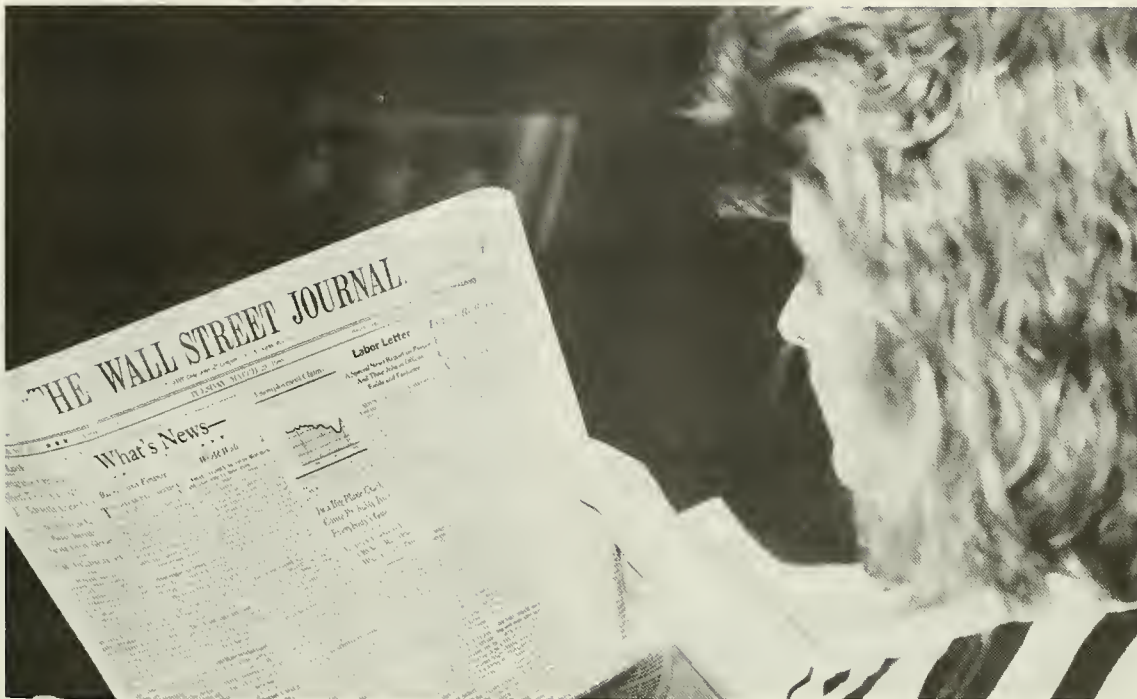
Electives (22 credits)

Twenty-two elective credits should be chosen from the following. No more than 10 credits may be taken in any one discipline.

BIOL.310	Environmental Conservation (4)
BIOL.387	Biology in Society (3)
BIOL.404	Ecological Techniques (3)
BIOL.435	Plant Ecology (4)
CHEM.361	Chemical and Bacteriological Studies of Water Pollution (3)
GEOG.319	Biogeography (Soils and Vegetation) (3)
GEOG.321	Interpretation of Aerial Photographs (3)
GEOG.329	Medical Geography (3)
GEOG.373	Climatology (3)
GEOG.377	Descriptive Meteorology (3)
GEOG.411	Studies in Environmental Hazards (3)
GEOG.413	Technology and the Environment (3)
GEOG.415	Geographical Aspects of Pollution (3)
HLTH.302,421	Field Work in Community Health (Obtain prior approval of topic in environmental health from instructor and advisor) (4-10)
HLTH.451	Ecological Aspects of Health (3)
PSYC.341	Environmental Psychology (3)







The School of Business and Economics

The mission of the School of Business and Economics is to provide a broad-based quality education in major areas of business and economics. The School of Business and Economics is committed to providing students an excellent educational experience grounded in liberal studies which provides a foundation for success in pursuing their career goals, in furthering their education, and in contributing to society. Fifty percent of the academic program for business students is in the liberal arts and sciences including the mathematical and computer sciences.

Consistent with its mission, the objectives of the School of Business and Economics encompass: (1) teaching, (2) research, and (3) service to the community. While highest priority is given to the teaching objectives of the School, the research and service objectives are integral parts of the total program. Solid exposure to fine arts, liberal arts, social and physical sciences, physical education and other disciplines ensures that graduates have the breadth of background recommended by professional accreditation organizations and valued by the business community.

All students completing programs in the School of Business and Economics are required to satisfy the General University Requirements as well as the requirements set forth in the Common Body of Knowledge and the major and/or area of concentration. Students can obtain degrees in Accounting, Economics, or Business Administration. Concentrations within the Business Administration degree are: Finance, Marketing, Management, Human Resources Management, and Operations Management.

The School of Business and Economics maintains an Assembly Membership with The American Assembly of Collegiate Schools of Business (AACSB).

COLLEGE OFFICE

Lecture Hall
Room 8
(301) 321-3342

Sam Barone, Dean

Business Administration

THE PROGRAM

The Business Administration program operates in a liberal arts framework, emphasizing oral and written communication skills. Completion of major requirements provides a core of basic skills as well as in-depth study in an area of interest chosen by the student. Students who fulfill the major requirements and the General University Requirements are awarded the Bachelor of Science degree. The Bachelor of Arts degree may be earned by completing the intermediate courses (or the equivalent) of a modern foreign language.

Students may elect to major in any program in the university and complement their major area of study with a *minor in Business Administration*. The minor consists of 24 credit hours in course work from the Business Administration Core. These core courses are selected to provide a basic understanding of the accounting, finance, and management functions. All courses in the minor must be completed with the grade of "C" or better.

PRE-ADMISSION REQUIREMENTS

Effective fall, 1989 students will be admitted as juniors on a competitive basis to the Business Administration major. Candidates for the Business Administration major must be formally admitted to the University. However, admission to the University does not constitute or guarantee admission to the major. Each semester, the Business Administration Selection Committee will consider applications for entry into the major in the following semester. In order to be considered for admission as a junior, students must have earned at least 56 credits, completed the pre-Business courses (i.e., freshmen—sophomore General University Requirements), and all of the 200 level courses in the Common Body of Knowledge (i.e., Microeconomic and Macroeconomic Principles, Basic Statistics I, Business Law I, Accounting Principles I and II, and one of the specific Computer Science courses) of the School of Business and Economics. Further, applicants must have at least a 2.50 cumulative quality point average (on a 4.0 scale) and must have earned a "C" grade or higher in all Common Body of Knowledge courses. The minimum grade point average requirement will be reviewed each year and may be adjusted as space availability dictates.

At the time of evaluation, applicants will be considered if their transcripts of courses already completed and their current schedules of courses include all of the requirements stated above. Students who are admitted to Towson State University with interest in Business but who do not have junior standing will be designated as "pre-Business Administration" majors and will be advised by faculty members in the respective departments of the School of Business and Economics.

Transfer students with more than 25 and fewer than 56 credit hours may be considered for admission to the program after accumulating 56 credit hours providing *one* of the following conditions is met:

1. Combined average of all college-level work taken at all institutions is at least 2.50.
2. Cumulative quality point average at Towson State, based on at least 30 attempted hours, is at least 2.50.

Students who believe that they have met similar criteria or have extenuating circumstances may petition the Business Administration Selection Committee.

Students who are officially declared business majors before the fall, 1989 semester will remain in the major as long as they maintain degree candidacy.

Selection Procedures

Students who will have met the pre-admission requirements by the end of the semester before their anticipated entry are eligible to apply. Applications should be submitted to the Business Administration Selection Committee in care of the School of Business and Economics, Towson State University, Towson, MD 21204, during the semester immediately preceding anticipated entry into the major. Transfer students must have official transcripts sent to the Business Administration Selection Committee from all institutions attended. These will be in addition to the transcripts submitted for undergraduate admission or readmission.

Each semester, the Selection Committee will determine the number of new major students who can be accommodated in the following semester. This determination will be made after consideration of faculty and space resources and the anticipated number of returning business students. All candidates will be ranked according to cumulative quality point average in all college level courses. Selections will be made from the top of the candidate ranking until the stipulated number is reached. Should any selected candidates cancel before the last opportunity to register, the next highest will be selected. Candidates selected by the committee after special consideration due to extenuating circumstances or in accordance with affirmative action guidelines will not replace any regularly selected candidates who have not cancelled.

Affirmative Action Policy

Towson State University does not discriminate on the basis of race, national origin, religion, color, sex, age, or condition of handicap. Factors such as sex, race, and handicap will be considered during the selection process for Business Administration if the Selection Committee discovers that the QPA requirements have an inequitable impact on any minority student population.

Academic Standards

Once admitted to the Business Administration major, students shall not be dismissed from the major unless they are academically dismissed from the University. Academically suspended students must meet with a faculty advisor in the School of Business and Economics after being readmitted to the University on probation. Readmitted students must follow the catalog in effect at the time of their original matriculation provided seven years have not elapsed.

MAJOR IN BUSINESS ADMINISTRATION

The degree in Business Administration is earned by completing the business core of 15 courses (45 credit hours) and by completing 5 courses (15 credit hours) in one of the six available areas of concentration. These are *Finance* (see the Accounting Department section of this *Catalog* for details), *Marketing and International Business* (see the Marketing Department section), *Management*, *Human Resource Administration*, and *Operations Management* (see the Management Department section). In addition, each student majoring in Business Administration must complete two upper-division courses in the liberal arts selected from approved listings available in the appropriate departmental office.

MINOR IN BUSINESS ADMINISTRATION

The 24-credit minor is designed to provide students in other majors with a background in the functional components of the business administration major: accounting, economics, finance, management and law or government relations.

Required Courses

ACCT.201	Accounting Principles I (3)
ACCT.202	Accounting Principles II (3)

ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
FIN.331	Principles of Financial Management (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
ACCT.225	Business Law I (3)
	or
MNGT.482	Business Environment and Public Policy (3)

Department of Accounting and Finance

Professor: HOLT

Associate Professors: CASTALDI (*Chair*), DIANTONIO, GRIMSHAW, LYNCH, RYMER, VENNOS

Assistant Professors: BUCHOFF, DOBY, FULLER, KAYVAN, PERRIER, ROSENBERG, SEGANISH

Instructors: FLANIGAN, HOLTER, MCCARTNEY

OFFICE

Lecture Hall, Room 11, (301) 321-2227

PROGRAMS OF THE DEPARTMENT

The *Accounting major* assists students in the development of skills and knowledge in accounting and related disciplines which will prepare the student for a professional career. It provides preparation for the CPA examination and for graduate study, as well as a thorough exposure to liberal arts which are most valuable in a business environment.

Students who fulfill the major requirements and the General University Requirements are awarded the Bachelor of Science degree. The Bachelor of Arts degree may be earned by completing the intermediate courses (or the equivalent) of a modern foreign language in addition to the major and General University Requirements.

A minimum of seven semesters is required to complete all required accounting courses in sequence. Majors are therefore advised to begin taking accounting courses very early in their college careers.

Because of the rigorous course work, the department recommends that students complete the following courses before declaring the major: two lab oriented sciences such as chemistry and physics, American or world literature, and algebra 2, trigonometry, or pre-calculus.

The *Finance Concentration* in the *Business Administration Major* prepares students for careers in banking and corporate finance, by developing skills and knowledge in finance and related disciplines.

PRE-ADMISSION REQUIREMENTS FOR ACCOUNTING

Students interested in majoring in accounting must first gain admission to Towson State University. Admission to the university, however, does not guarantee admission to the accounting major. After completing a *minimum* of 9 credits in accounting, the student must meet with an Accounting Department faculty advisor to determine whether the requirements have been met. The following academic criteria shall be met in order to declare the accounting major:

1. A student must pass the AICPA Level I achievement test with

a score in the 55th percentile or higher. This will permit/prohibit registration in Intermediate Accounting II (302).

Students who transfer to Towson from community colleges which have articulation agreements with TSU, and students who transfer from four-year institutions, shall be allowed to transfer Intermediate Accounting II (ACCT. 302) upon passing the AICPA Level I achievement test with a score in the 75th percentile or higher.

2. Present an overall Grade Point Average of at least 2.50 on a 4.00 scale for all courses completed at the time of declaring the major.

This requirement may be waived under certain circumstances by the department chair.

3. Present a Grade Point Average of at least 2.50 on a 4.00 scale for all Accounting courses completed at the time of declaring the major.
4. A student must have passed either one Calculus or one Statistics course with a grade of "C" or better. The Towson State courses that shall be considered are:
Calculus I or II (MATH.273/274) or Calculus for Applications (MATH.211)
Basic Statistics (MATH.231) or Math Statistics (MATH.332) or Fundamental Statistics for Economics (ECON.301)
Equivalent courses, taken at other institutions and properly transferred to Towson State, shall also be considered.

Affirmative Action Policy

Towson State University does not discriminate on the basis of race, national origin, religion, color, sex, age, or condition of handicap in its academic program. Some groups, however, have been historically under-represented in the field of accounting.

The department maintains relevant data on admission to the accounting major in order to monitor the impact of these standards on minority student populations.

The department shall waive any one of the above criteria if it is demonstrated to have an inequitable impact on the minority student population.

Academic Standards

Students who have been admitted to the accounting major should regularly meet with their faculty advisors (at least once a year) in order to evaluate their progress in completing degree requirements.

Once admitted to the accounting major, a student shall not be dismissed from the major unless that student is academically dismissed from the university. In such cases, the student shall meet with an accounting faculty advisor after being readmitted to the university as a degree candidate in order to reenter the accounting major.

MAJOR IN ACCOUNTING

The major in Accounting requires 69 credits completed with a grade of "C" or higher and a score above the 50th percentile on the AICPA Level II Achievement Test.

Accounting Principles I & II (201, 202) and Financial and Management Accounting (205, 206) are separate and distinct course units. A student who takes 201 must complete 202 and cannot cross-over to 206. Similarly, a student who begins with 205 must complete 206.

While the 201-202 sequence is preferable for Accounting majors, there is no detriment if an Accounting major begins with 205 and ends with 206. The two units are at the introductory level of Accounting.

Requirements for the Major**Required Courses (45 credits)**

The Common Body of Knowledge (CBK) for accounting majors will comprise a total of 45 credits. In addition all accounting majors must complete 24 credits of upper level accounting courses as indicated below.

ACCT.201 & 202	Accounting Principles I & II (6)
ACCT.225 & 226	Business Law I & II (6)
ECON.201 & 202	Micro & Macro Economics (6)
COSC.115	Introduction to Information Systems (3)
FIN.331	Princ. of Financial Management (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
MNGT.363	Quantitative Methods (3)
MNGT.365	Product Management (3)
MNGT.481	Business Policy (3)

One advanced economics course from the following

ECON.309	Intermediate Price Theory (3)
ECON.313	Money and Banking (3)
ECON.331	Government and Economic Life (3)
ECON.337	Public Finance & Non-Market Decision Making (3)

One statistics course from the following

ECON.301	Fundamental Statistics for Economics (3)
MATH.231	Basic Statistics (3)
MATH.332	Mathematical Statistics (3)

Required Courses (24 credits)

In addition to the above, all accounting majors must complete 24 credits of upper level accounting courses as indicated below:

ACCT.301	Intermediate Accounting I (3)
ACCT.302	Intermediate Accounting II (3)
ACCT.303	Intermediate Accounting III (3)
ACCT.321	Advanced Accounting I (3)
ACCT.341	Cost Accounting I (3)
ACCT.361	Tax Accounting I (3)
ACCT.401	Auditing I (3)
ACCT.402	Auditing II (3)

Recommended Courses

ACCT.322	Advanced Accounting II (3)
ACCT.342	Cost Accounting II (3)
ACCT.362	Tax Accounting II (3)
PSYC.327	Industrial Psychology (3)
PSYC.315	Motivation (3)
PSYC.409	Organizational Psychology (3)

One of the following

PHIL.101	Introduction to Philosophy (3)
PHIL.111	Logic (3)
PHIL.371	Ethical Problems: Business and Society

Required Testing

Students must achieve a score above the 50th percentile on the AICPA Level II Achievement Test in order to complete the Accounting Major.

Advanced Writing Course Recommendation

All students are required to take an advanced writing course to fulfill Group IC of the General University Requirements. Accounting majors are encouraged to fulfill this requirement by taking one of the following.

ECON.325	Economic Development (3)
ECON.333	Economics of Poverty and Discrimination (3)
ENGL.313	Advanced Composition (3)
ENGL.317	Writing for Business and Industry (3)

ENGL.318	Advanced Informational Writing (3)
WRIT.411	Organizational Communication (3)

Sample Course Sequence

The following sample curriculum indicates how the Accounting major requirements and the General University Requirements may be completed in four years.

The Roman numerals in parentheses indicate the General University Requirements which are fulfilled.

Freshman Year**FIRST SEMESTER**

Math (Prerequisite to Calculus and Statistics)
College Writing (I-B)
Accounting Principles I
Chemistry or Physics 101 (IV)
Economics I (V)

SECOND SEMESTER

Literature or 200 level Modern Language (III)
Economics II
Group II GUR
Accounting Principles II
Calculus or Statistics (IV)

Sophomore Year**FIRST SEMESTER**

Intermediate Accounting I
Group III GUR
Computer Science (IV)
Calculus or Statistics
Business Law I

SECOND SEMESTER

Intermediate Accounting II
Economics (choice among five) (V)
Group II GUR
Group I-A GUR (Phys. Ed.)
Business Law II
Elective or strongly rec. course

Junior Year**FIRST SEMESTER**

Tax Accounting I
Cost Accounting I
Intermediate Accounting III
Management Theory
Fundamentals of Speech Comm. (III)

SECOND SEMESTER

Advanced Accounting I
Group V GUR
Financial Management
Writing Course (I-C)
Quantitative Methods

Senior Year**FIRST SEMESTER**

Auditing I
Principles of Marketing
Group III GUR
Production Management
Elective or strongly rec. course

SECOND SEMESTER

Auditing II
Business Policy

Elective or strongly rec. course
 Elective or strongly rec. course
 Group V GUR

Transfer Credit Policy

Credit toward the Accounting major will be given for approved courses taken at other schools.

Students planning to transfer from junior or community colleges are encouraged to take six hours of Accounting Principles and six hours of Economic Principles as part of their first two years of college. Major credit will also be granted for *any two* of the following courses successfully completed at a community or junior college: Intermediate Accounting I (validated by Intermediate Accounting 302), Cost Accounting I (validated by Cost Accounting 342), and Tax Accounting I (validated by Tax Accounting 362). Because the Accounting Major requires a minimum of five sequential, one semester, upper-division accounting courses, students may wish to consider transferring to Towson after three semesters at the junior or community college in order to complete their undergraduate programs in a total of four years.

Upper-division courses required for the major which are taken at a two-year/community college must be validated by taking an advanced upper-division course at TSU.

Students who complete Intermediate Accounting I at another institution must achieve a score above the 55th percentile on the AICPA Level I Test before entering Intermediate Accounting II (ACCT.302) at Towson.

Students currently enrolled at Towson State University may be given credit for courses at other accredited four-year colleges if approval is granted in advance.

MAJOR IN BUSINESS ADMINISTRATION — CONCENTRATION IN FINANCE

Requirements for the Major

The Common Body of Knowledge (CBK) for business majors concentrating in finance consists of the same courses that are required for Marketing and Management concentrations comprising 45 credits. In addition, the concentration courses below must be completed with a grade of "C" or better.

Required Courses (15 credits)

FIN.332	Advanced Financial Management (3)
FIN.333	Investments and Security Analysis (3)
FIN.430	Management of Financial Institutions (3)
FIN.435	International Finance (3)
FIN.439	Financial Policy (3)

Recommended Courses

FIN.433	Portfolio Management (3)
FIN.470	Topics of Finance (3)
FIN.491	Seminar in Finance (3)

Upper-Division Electives (6 credits)

Each Business Administration major must complete 6 credits of upper-division courses selected from the following disciplines:

Anthropology	Modern Languages
Art	Music
Dance	Philosophy
Economics	Political Science
English	Psychology
Geography	Sociology
History	Theatre Arts

Students should obtain approval for course selections from their Finance concentration advisor. Additional writing courses are en-

couraged; however, courses used to satisfy this requirement for the major *cannot* be used to satisfy any General University Requirement.

Suggested 4 Year Curriculum

Freshman Year

FIRST SEMESTER

MATH.111	Algebra for Applications (3)
	GUR
	GUR
	GUR
	GUR

SECOND SEMESTER

MATH.231	Statistics (3)
COSC.115	Intro. to Information Systems (8)
	GUR
	GUR
	GUR

Sophomore Year

FIRST SEMESTER

ACCT.201	Accounting Principles I (3)
ECON.201	Microeconomic Principles (3)
MATH.211	Calculus for Applications (3)
	GUR
	GUR

SECOND SEMESTER

ACCT.202	Accounting Principles II (3)
ECON.202	Macroeconomic Principles (3)
ACCT.225	Business Law I (3)
	GUR
	GUR

Junior Year

FIRST SEMESTER

FIN.331	Principles of Financial Management (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
	Upper-Level Writing Course
	GUR

SECOND SEMESTER

FIN.332	Advanced Financial Management (3)
FIN.333	Investments & Sec. Analysis (3)
ECON.313	Money & Banking (3)
MNGT.363	Quantitative Methods (3)
	GUR

Senior Year

FIRST SEMESTER

FIN.430	Management of Financial Institutions (3)
FIN.435	International Finance (3)
MNGT.482	Business & Public Policy (3)
MNGT.365	Principles of Prod. Management (3)
	GUR

SECOND SEMESTER

FIN.439	Financial Policy (3)
MNGT.481	Business Policy (3)
MNGT.437	Management Information Systems (3)

ECON.309 Intermediate Price Theory (3)
U/D Non- (See "Upper Division Electives," above)
business
elective

Department of Economics

Professors: BARONE, FENSTERMAKER (*Chair*), PAUL, SHIN

Associate Professors: DORN, GEORGIOU, WEINTRAUB, WOROBY

Assistant Professors: EGGER, GERMAN, KONG, LAURENCE, PALASEK, ROAYAEI

OFFICE

Linthicum Hall, Room 118F, (301) 321-2959

PROGRAMS OF THE DEPARTMENT

The Department of Economics offers a *major* and a *minor in Economics*. The purpose of a major in Economics is to help students understand the economic society in which they live. The major in Economics is designed to provide preparation for careers in industry, government or teaching as well as preparation for graduate study in Economics.

All students majoring in Economics must contact the department to be assigned advisors who will assist them in designing their program. Students should meet with their advisors each semester to discuss their progress and plans of study.

MAJOR IN ECONOMICS

Economics majors must complete 33 credits with a grade of "C" or higher.

Requirements for the Major

Required Courses (21 credits)

ECON.201 Microeconomic Principles (3)
ECON.202 Macroeconomic Principles (3)
ECON.301 Fundamentals of Statistics (3)
ECON.309 Intermediate Price Theory (3)
ECON.310 Macroeconomic Theory (3)
ECON.313 Money and Banking (3)

At least one of the following:

ECON.401 Intro. to Econometrics (3)
ECON.409 Managerial Economics (3)
ECON.410 Business Cycles Forecasting (3)
ECON.419 Applied Microeconomics (3)
ECON.421 International Economics (3)
ECON.451 Intro. to Mathematical Economics (3)
ECON.479 Topics in Economics (3)
ECON.485 Seminar on Economic Issues (3)
ECON.493 Workshop on Economic Education (3)

Approved Electives (12 credits)

Twelve additional credits in Economics, six of which may be from the following courses outside of the department.

ACCT.361 Tax Accounting I (3)
COSC.165 Fundamentals of Computing (3)
COSC.212 Introduction to Business Programming (3)
FIN.332 Advanced Corporate Finance (3)
GEOG.359 Economics Geography (3)
GEOG.391 Urban Systems I (3)

GEOG.393 Transportation & Infrastructure Planning (3)
GEOG.403 Planning Implementation (3)
HIST.366 History of American Business (3)
HIST.481 History of Management (3)
HRM.451 Industrial Relations (3)
MATH.377 Mathematical Models (3)
MKTG.371 Principles of Transportation (3)
MNGT.363 Quantitative Methods for Business I (3)

MINOR IN ECONOMICS

Economics minors must complete 24 credits with a grade of "C" or higher. The minor includes the three required courses listed below and 15 hours of approved electives.

Required Courses (9 credits)

ECON.201 Microeconomic Principles (3)
ECON.202 Macroeconomic Principles (3)
ECON.313 Money and Banking (3)

Approved Electives (15 credits)

DOUBLE MAJOR PROGRAM

A student may declare a second major and obtain a degree which certifies that both majors have been completed. A list of courses which count toward both Economics and another major is in the departmental office.

ECONOMICS AND OTHER BUSINESS MAJORS

A student who meets the requirements for a major in Accounting, Finance, Management, or Marketing may be able to major in Economics by taking only three or four Economics courses beyond those Economics courses required for these business majors.

Economics and Mathematics

Economics majors must take either MATH.111, Algebra for Applications or MATH.115, Basic Mathematics for the Sciences or MATH.116, Math-ematics II; or MATH.119, Pre-Calculus. Those who plan graduate study in Economics are advised to take either MATH.211, Calculus for Applications or MATH.273, Calculus I and MATH.274, Calculus II (and the appropriate prerequisites) as well as other advanced mathematics courses.

Students who major in both Economics and Mathematics may count up to 12 credits of specified mathematics courses toward the 33 hours required for the Economics major. Further details are in this *Catalog* under Mathematics.

Economics and Geography/Environmental Planning

This program is particularly useful to the students who are interested in environmental and urban planning.

TRANSFER CREDIT POLICY

The Economics Department accepts economics credit from other accredited colleges and universities. Transfer students must take at least 15 credits within this department.

DEPARTMENTAL ACTIVITIES

The department sponsors an Economics Club which presents lectures, seminars, film and other activities relating to economic analysis and problems. The department works with the Career Education Office to provide internships to qualified students. There is a minimester course which visits points of economic interest in the Baltimore area. An award is given by the department to the outstanding senior majoring in Economics.

COUNCIL ON ECONOMIC EDUCATION IN MARYLAND

CEEM is affiliated with the Institutional Advancement Division and works in close cooperation with the Department of Economics and the College of Education. The council has the responsibility of increasing the quantity and quality of economics taught at Maryland schools and colleges and in the general community. The council administers its program throughout the state. The Council Trustees comprise major Maryland business, labor, government, agriculture, and education leaders. Dr. Hoke L. Smith, president of Towson State University, is chairman and the president is Francis P. Lucier, chairman and chief executive officer of Black and Decker Corporation. The Council's executive director is Dr. Carol Adams.

Department of Management

Professor: BASURAY (*Chair*)

Associate Professors: BROWN, DARROW, DeCENZO, ONDECK, SHAFER, SOLOMON, THAVIKULWAT

Assistant Professors: DEHAIS, HANNON, LARI, NAG, SOMERS

Instructor: McCAMPBELL

OFFICE

Stephens Hall Annex, Room A 135, (301) 321-2934

THE PROGRAM

The Department of Management offers concentrations in Strategic Management, Human Resource Management, and a track in Production and Operations Management. In addition to the core course requirements, students must complete 15 credit hours in one of these areas of concentration. Students are also required to complete 6 credit hours of upper-division elective courses selected from approved listings.

All course work required for the major must be completed with the grade of "C" or higher. To enroll in courses, students must satisfy all prerequisites published in this catalog.

Requirements for the Major

Core Courses (45 credits) (Common Body of Knowledge)

The following 45 credits of core courses must be completed for all concentrations.

ECON.201	Microeconomic Principles (3)
ECON.202	Macroeconomic Principles (3)
MATH.231	Basic Statistics I (3)
ACCT.225	Business Law I (3)
ACCT.201	Accounting Principles I (3)
ACCT.202	Accounting Principles II (3)
COSC.115	Intro. of Information Systems (3)
	or
COSC.212	Intro. to Business Programming (3)
	or
COSC.165	Fundamentals of Computing (3)
FIN.331	Principles of Financial Management (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
MNGT.363	Quantitative Methods for Business I (3)
MNGT.365	Principles of Production and Operations Management (3)

MNGT.437	Management Information Systems (3)
MNGT.481	Business Strategy and Policy (3)
MNGT.482	Business Environment and Public Policy (3)

Human Resources Management Concentration

Designed for students seeking a career in human resources administration or management.

Required Courses (15 credits)

HRM.381	Human Resources Administration (3)
HRM.451	Industrial Relations (3)
HRM.433	Wage and Salary Administration (3)

Two of the following:

HRM.452	Grievance and Arbitration (3)
MNGT.463	Organizational Leadership (3)
MNGT.465	Organizational Development (3)
HRM.470-479	Special Topics in Human Resource Management (3)

Upper-Division Electives (6 credits)

Each Business Administration major must complete 6 credits of upper-division courses selected from the following disciplines:

Anthropology	Modern Languages
Art	Music
Dance	Philosophy
Economics	Political Science
English	Psychology
Geography	Sociology
History	Theatre Arts

Students are encouraged to seek advice on course selections appropriate to their interests. Additional writing courses are encouraged; however, courses used to satisfy this requirement for the major *cannot* be used to satisfy any General University Requirement.

Sample Course Sequence: Human Resource Management Concentration

The following sample curriculum indicates how the Business Administration major and Human Resource Management concentration requirements may be completed in four years.

FRESHMAN YEAR

First Semester

Math 111 or 115 (GUR)	Prerequisite for statistics
GUR	
GUR	
GUR	

Second Semester

COSC 115 or 212 or 165 (GUR)	Computer Science
GUR	
GUR	
GUR	
GUR	

SOPHOMORE YEAR

First Semester

ACCT 201	Accounting Principles I
ACCT 225	Business Law I
ECON 201(GUR)	Microeconomic Principles

Second Semester

ACCT 202	Accounting Principles II
MATH 231	Basic Statistics

ECON 202 GUR GUR	Macroeconomic Principles
JUNIOR YEAR	
First Semester	
FIN 331	Principles of Financial Management
MNGT 361 U/D Non-Business Elective	Management Theory (see "Upper Division Electives," above)
Second Writing Course (GUR) GUR	
SENIOR YEAR	
First Semester	
HRM 433 MNGT 365	Wage and Salary Analysis Principles of Production and Operations Management
MNGT 437 U/D Non-Business Elective:	Management Information Systems (See "Upper Division Electives," above)
ELECTIVE	
Second Semester	
HRM 451 MNGT 481 MNGT 463	Industrial Relations Business Strategy and Policy Organizational Leadership
HRM 470-479 U/D Non-Business Elective	or Special Topics in Human Resource Management (See "Upper Division Electives," above)

Operations Management Track

Designed for students planning a career in production and operations management.

Required Courses (15 credits)

OPRE.419	Logistics Management (3)
OPRE.439	Materials Management (3)
OPRE.459	Purchasing Management (3)
OPRE.497	Practicum in Operations Management (3)

and one of the following:

MNGT.467	Quantitative Methods for Business II (3)
MNGT.455	Small Business Development (3)
MNGT.463	Organizational Leadership (3)
HRM.451	Industrial Relations (3)
OPRE.495	Independent Research (Operations Management) (3)
OPRE.491	Directed Readings (Operations Management) (3)

Sample Course Sequence: Operations Management Track

The following sample curriculum indicates how the Business Administration major and Operations Management track requirements may be completed in four years.

FRESHMAN YEAR

First Semester

MATH.111/115(GUR)	Prerequisite for statistics
GUR	
GUR	
GUR	
GUR	

Second Semester

COSC.115/212/165/(GUR)	Computer Science
GUR	
GUR	
GUR	
GUR	

SOPHOMORE YEAR

First Semester

ACCT.201	Accounting Principles I
MATH.231	Basic Statistics
ECON.201(GUR)	Microeconomic Principles
GUR	
GUR	

Second Semester

ACCT.202	Accounting Principles II
ACCT.225	Business Law I
ECON.202	Macroeconomic Principles
GUR	
GUR	

JUNIOR YEAR

First Semester

MKTG.341	Principles of Marketing
FIN.331	Principles of Financial Management
MNGT.361	Management Theory
MNGT.363	Quantitative Methods for Business I
GUR	

Second Semester

MNGT.365	Principles of Production and Operations Management
U/D Non-Business Elective	(See "Upper Division Electives," above)
U/D Non-Business Elective	(See "Upper Division Electives," above)
Second Writing Course (GUR)	
GUR	

SENIOR YEAR

First Semester

OPRE.439	Materials Management
OPRE.459	Purchasing Management
MNGT.482	Business Environment and Public Policy
OPRE.497	Practicum in Operations Management
MNGT.437	Management Information Systems

Second Semester

OPRE.419	Logistics Management
MNGT.481	Business Strategy and Policy
OPERATIONS MANAGEMENT TRACK ELECTIVE (see below)	
ELECTIVE	
ELECTIVE	

Operations Management Track Electives

MNGT.467	Quantitative Methods for Business II
MNGT.455	Small Business Development
MNGT.463	Organizational Leadership
HRM.451	Industrial Relations
OPRE.495	Independent Research (Operations Management)
OPRE.491	Directed Readings (Operations Management)

Strategic Management Concentration

Designed for students interested primarily in administration or general business management.

Required Courses (15 credits)

MNGT.465	Organizational Development (3)
MNGT.463	Organizational Leadership (3)
HRM.381	Human Resources Administration (3)

Two of the following:

HRM.451	Industrial Relations (3)
MNGT.455	Small Business Development (3)
MNGT.470-479	Special Topics in Management (3)
MNGT.438	Multinational Management and Strategies (3)

Sample Course Sequence: Strategic Management Concentration

The following sample curriculum indicates how the Business Administration major and Strategic Management Concentration requirements may be completed in four years

FRESHMAN YEAR

First Semester

MATH.111/115(GUR)	Prerequisite for statistics
GUR	
GUR	
GUR	
GUR	

Second Semester

COSC.115/212/165(GUR)	Computer Science
GUR	
GUR	
GUR	
GUR	

SOPHOMORE YEAR

First Semester

ACCT.201	Accounting Principles I
MATH.231	Basic Statistics
ECON.201	Microeconomic Principles (GUR)
GUR	
GUR	

Second Semester

ACCT.202	Accounting Principles II
ACCT.225	Business Law I
ECON.202	Macroeconomic Principles
GUR	
GUR	

JUNIOR YEAR

First Semester

FIN.331	Principles of Financial Management
MNGT.361	Management Theory
U/D Non-Business Elective (see "Upper Division Electives," above)	
Second Writing Course (GUR)	
GUR	

Second Semester

MKTG.341	Principles of Marketing
MNGT.363	Quantitative Methods for Business I
HRM.381	Human Resource Administration
U/D Non-Business Elective (see "Upper Division Electives," above)	
GUR	

SENIOR YEAR

First Semester

MNGT.465	Organization Development
MNGT.482	Business Environment & Public Policy
MNGT.365	Principles of Production and Operations Management
MNGT.463	Organizational Leadership

STRATEGIC MNGT CONCENTRATION ELECTIVE (see below)

Second Semester

MNGT.481	Business Strategy and Policy
MNGT.437	Management Information Systems
STRATEGIC MNGT CONCENTRATION ELECTIVE (see below)	
ELECTIVE	
ELECTIVE	

Strategic Management Concentration Electives

MNGT.438	Multinational National Management and Strategies
HRM.451	Industrial Relations
MNGT.455	Small Business Development
MNGT.470-479	Special Topics in Management

MINOR IN BUSINESS ADMINISTRATION

The 24-credit minor is designed to provide students in other majors with a background in the functional components of the business administration major: accounting, economics, finance, management, marketing and law or government relations.

See the "Business Administration" section of this *Catalog* for required courses.

TRANSFER STUDENT POLICIES

Credit toward the Business Administration major will be given for approved courses taken at other schools. Students planning to transfer from junior or community colleges are encouraged to take six hours of accounting as part of their first two years of college. Six hours of economics may also be taken. Students are encouraged to take finance, marketing and management after transferring to Towson State University. Transfer students must complete, with a "C" or better, at least 30 hours of upper-division credits in the following: FIN, OPRE, MKTG, HRM, MNGT at Towson State University in order to qualify for the Business Administration major.

Lower-division courses taken at another four-year college or a community college that correspond to courses offered only at the upper-division for native students at Towson State University have restrictions as to transferability at Towson State. Basic business courses in the Common Body of Knowledge (CBK) which are offered *only* at the junior level at TSU such as: Principles of Marketing; Financial Management; and Management Theory may be transferable from a community college only upon meeting validation requirements. Validation generally means that another specified course in the discipline must be completed with a minimum grade of "C" for the transfer credit to be granted.

A transferred course from a four-year college that possesses level and content equivalency of a TSU course may be used to satisfy a core/elective requirement with the approval of the Management department. The department will accept only one transferred course in fulfillment of a concentration requirement and it must be validated.

DEPARTMENTAL PROGRAMS, ACTIVITIES

The department offers the following programs: Internship/Cooperative Education Program, Directed Independent Study Program, Credit for Prior Learning Program, and sponsors these business clubs: American Production and Inventory Control Society, American Society of Personnel Administrators, Society for the Advancement of Management, AIESC.

Students should consult their advisors for more information.

Department of Marketing

Professor: KING (Chair)

Associate Professor: GRAZER, MARONICK, NICHOLAS

Assistant Professors: LENNON, SCHLIMM, L. SMITH

Instructors: KAYNAMA, K. SMITH

OFFICE

Stephens Hall Annex, Room 137, (301) 321-3351

THE PROGRAM

The Department of Marketing offers a concentration in Marketing. In addition to the core course requirements, students must complete 15 credit hours in the area of concentration. Students are also required to complete 6 credit hours of upper-division work selected from a listing of approved disciplines available in the Marketing Department Office.

All course work required for the major must be completed with the grade of "C" or higher.

Requirements for the Major

Core Courses (45 credits) (Common Body of Knowledge)

The following 45 credits of core courses must be completed for both concentrations.

ECON.201	Microeconomics Principles (3)
ECON.202	Macroeconomic Principles (3)
MATH.231	Basic Statistics I (3)
ACCT.225	Business Law I (3)
ACCT.201	Principles of Accounting I (3)
ACCT.202	Principles of Accounting II (3)
COSC.115	Intro. to Information Systems (3)
	or
COSC.212	Intro. to Business Programming (3)
	or
COSC.165	Fundamentals of Computing (3)
FIN.331	Principles of Financial Management (3)
MKTG.341	Principles of Marketing (3)
MNGT.361	Management Theory (3)
MNGT.363	Quantitative Methods for Business I (3)
MNGT.365	Production Management (3)
MNGT.437	Management Info. Systems (3)
MNGT.481	Business Strategy and Policy (3)
MNGT.482	Business Environment and Public Policy (3)

Marketing Concentration

Designed for students seeking an understanding of the processes of marketing and business.

Required Courses (15 credits)

MKTG.431	Advanced Marketing Management (3)
MKTG.441	Marketing Research and Forecasting (3)

Three of the following:

MKTG.345	Advertising Management (3)
MKTG.351	Sales Management (3)
MKTG.445	International Marketing (3)
MKTG.442	Seminar in Marketing (3)
MKTG.343	Physical Distribution Management (3)
MKTG.371	Principles of Transportation (3)
MKTG.419	Traffic Management (3)
MKTG.443	Industrial Marketing (3)
MKTG.470-479	Special Topics in Marketing (3)

Upper-Division Electives (6 credits)

Each Business Administration major must complete 6 credits of upper-division courses selected from the following disciplines:

Anthropology	Modern Languages
Art	Music
Dance	Philosophy
Economics	Political Science
English	Psychology
Geography	Sociology
History	Theatre Arts

Students are encouraged to seek advice on course selections appropriate to their interests. Additional writing courses are encouraged; however, courses used to satisfy this requirement for the major *cannot* be used to satisfy any General University Requirement.

Suggested Four Year Curriculum

FRESHMAN YEAR

First Semester

MATH.111 or 115(GUR) Prerequisite for statistics
GUR
GUR
GUR
GUR

Second Semester

COSC.115 or 165 or 212(GUR) Computer Science
GUR
GUR
GUR
GUR

SOPHOMORE YEAR

First Semester

ACCT.201 Accounting Principles I
ECON.201(GUR) Microeconomics
MATH.231 Basic Statistics I
GUR
GUR

Second Semester

ACCT.202 Accounting Principles II
ACCT.225 Business Law I
ECON.202 Macroeconomics
GUR
GUR

JUNIOR YEAR

First Semester

MKTG.341 Principles of Marketing
FIN.331 Principles of Financial Management
MNGT.361 Management Theory
GUR
GUR

Second Semester

MNGT.363 Quantitative Methods for Business I
MKTG.441 Marketing Research and Forecasting
Marketing Elective (from the approved list)
Second Writing Course (GUR)
U/D Non-Business Elective (see "Upper Division Electives," above)

SENIOR YEAR**First Semester**

MKTG.431 Advanced Marketing Management
 Marketing Elective (from the approved list)
 MNGT.365 Production Management
 U/D Non-Business Elective (see "Upper Division Electives," above)
 Marketing Elective

Second Semester

MNGT.481 Business Strategy and Policy
 MNGT.437 Management Information Systems
 MNGT.482 Business Environment and Public Policy
 ELECTIVE
 ELECTIVE

Marketing Electives:

MKTG.343 Physical Distribution
 MKTG.345 Advertising Management
 MKTG.351 Sales Management
 MKTG.371 Principles of Transportation
 MKTG.419 Traffic Management
 MKTG.442 Seminar in Marketing
 MKTG.445 International Marketing
 MKTG.443 Industrial Marketing
 MKTG.470-479 Special Topics in Marketing

MINOR IN BUSINESS ADMINISTRATION

The 24-credit minor is designed to provide students in other majors with a background in the functional components of the business administration major: accounting, economics, finance, management, marketing, and law or government relations.

See the "Business Administration" section of this *Catalog* for required courses.

TRANSFER STUDENT POLICIES

Credit toward the Business Administration major will be given for approved courses taken at other schools. Students planning to

transfer from junior or community colleges are encouraged to take six hours of accounting as part of their first two years of college. Six hours of economics may also be taken. Students are encouraged to take finance, marketing and management after transferring to Towson State University. Transfer students must complete, with a "C" or better, at least 30 hours of upper-division credits in the following: FIN, MKTG, MNGT, OPRE, and HRM at Towson State University in order to qualify for the Business Administration Major.

Lower-division courses taken at another four-year college or a community college that correspond to courses offered only at the upper-division for native students at Towson State University have restrictions as to transferability at Towson State. Basic business courses in the Common Body of Knowledge (CBK) which are offered *only* at the junior level at TSU such as: Principles of Marketing; Financial Management; and Management Theory may be transferable from a community college only upon meeting validation requirements. Validation generally means that another specified course in the discipline must be completed with a minimum grade of "C" for the transfer credit to be granted.

A transferred course from a four-year college that possesses level and content equivalency of a TSU course may be used to satisfy a core/elective requirement with the approval of the Marketing department. The department will accept only one transferred course in fulfillment of a concentration requirement and it must be validated.

DEPARTMENTAL PROGRAMS, ACTIVITIES

The department offers the following programs: Internship/Cooperative Education Program, Directed Independent Study Program, Credit for Prior Learning Program, and sponsors these business clubs: American Marketing Association and AIESC.

Students should consult their advisor for more information.



Course Descriptions

THE MEANING OF COURSE NUMBERS

Each department of the university has one or more code numbers and abbreviations for each general subject area (e.g., French in the modern language department). The code abbreviations are shown in parentheses at the head of the course listings. The code numbers form a four digit Subject Classification Number, which precedes a three digit Course Classification Number, forming a seven digit Course Number. Each course has a distinctive number with the following significance:

Course Classification Numbers	Significance of Numbers
.001-.009	Temporary, Minimester Courses.
.010-.099	Special Courses with and without credit and Physical Education Lab skill courses with credit.
.101-.299	Lower-Division Undergraduate Courses (UG)
.301-.499	Upper-Division Undergraduate Courses. Certain courses may be taken for either graduate or undergraduate credit. (UG & G) Their graduate course numbers are in brackets.
.500-.899	Graduate Division Courses.

ALPHA & NUMERIC DISCIPLINE CODES

Accounting	ACCT
Adult Education	ADED
African-American Studies	BLST
American Studies	AMST
Anthropology	ANTH
Art	ART
Art Education	ARED
Biology	BIOL
Chemistry	CHEM
Chinese	CHNS
Communication Sciences & Disorders	SPPA
Computer Science	COSC
Dance	DANC
Developmental Mathematics	DVMT
Developmental Reading	DVRD
Developmental Writing	DVWR
Early Childhood Education	ECED
Economics	ECON
Elementary Education	ELED
English	ENGL
Finance	FIN
French	FREN
General Education	EDUC
General Studies	GENL
Geography & Environmental Planning	GEOG
German	GERM
Greek	GRK
Health Science	HLTH
Hebrew	HEBR
History	HIST
Human Resource Management	HRM
Industrial Management	OPRE
Instructional Technology	ISTC
Italian	ITAL
Japanese	JPNS
Latin	LATN
Management	MNGT
Marketing	MKTG
Mass Communication	MCOM
Mathematics	MATH
Medical Technology	MDTC
Music	MUSC
Music Applied	MUSA

Music Education	MUED
Nursing	NURS
Occupational Therapy	OCTH
Philosophy and Religion	PHIL
Physical Education	PHEC
Physical Science	PHSC
Physics	PHYS
Political Science	POSC
Portuguese	PORT
Psychology	PSYC
Russian	RUSS
Safety Education	DRED
Science Education	SCIE
Secondary Education	SCED
Sociology	SOCI
Spanish	SPAN
Special Education	SPED
Speech Communication	SPCH
Theatre Arts	THEA
Women's Studies	WMST
Writing	WRIT

SEQUENTIAL COURSES

Courses whose numbers are separated by a hyphen are to be taken in sequence. When course numbers are separated by a comma, either semester may be taken independently of the other (See Prerequisites).

ELECTIVE COURSES

Students majoring in the various areas will need to choose their electives with extreme care. Before registering for courses which are not required students should consult their advisors. The advice of the instructor of the course or the chair of the department in which the elective course is listed may be needed before a wise decision is made concerning the choice of an elective.

CREDIT VALUE OF COURSES

The semester credit value of the course is indicated in the parentheses following the title.

TIME OF OFFERING

All required courses are usually offered each semester. Elective courses in each department are usually offered at least one semester each year. All non-required courses are offered subject to sufficient enrollment.

PREREQUISITES

Prerequisites are indicated to assist students in determining the proper sequence of courses and in identifying any special skills and knowledge they should possess before attempting a particular course. Because prerequisites are advisory, students are cautioned about attempting courses without having completed prerequisites but may do so at their own risk.

However, students should remember that they are responsible for meeting *published* prerequisites, which is to be enforced by the appropriate Departments and Colleges.

For courses which require special permit cards or consent of the instructor and/or department, the instructor may deny entry to any student who does not have such permission.

ACCOUNTING (ACCT)

Lower Division

ACCT 201 ACCOUNTING PRINCIPLES I (3) This course covers the fundamental accounting principles beginning with the analysis of business transactions, and emphasizes the procedural aspects of the recording process, record-keeping and management techniques. The specific accounting principles concerning cash receivables, inventory, fixed assets, current liabilities and payroll are covered in a less theoretical and more procedural approach. Not open to students who have taken ACCT 205 or 0506.201. Preferred sequence for accounting majors (UG)

ACCT 202 ACCOUNTING PRINCIPLES II (3) This course covers the fundamental accounting principles concerning financial statements and their analysis. It emphasizes the procedural aspects of accounting principles concerning long-term liabilities, partnership and corporation equity accounts, operating expense applications, and manufacturing accounting. It also covers preparation of the statement of changes in the financial position and the techniques of financial analysis. Not open to students who have taken ACCT 206, 0506.202, or 0506.203. Preferred sequence for accounting majors. Prerequisite: ACCT 201. (UG)

ACCT 206 MANAGEMENT ACCOUNTING (3) This course covers the introductory concepts which relate to the managerial uses of accounting information. It specifically covers cost volume profit analysis, budgeting, costs control, analysis of working capital. This course emphasizes the conceptual approach to these accounting principles. Not open to students who have taken ACCT 202, 0506.202 or 0506.203. Preferred sequence for business majors. Prerequisite: ACCT 205. (UG)

ACCT 211 HONORS ACCOUNTING PRINCIPLES I This course is similar to ACCT 201 except that it emphasizes more conceptual approaches to accounting and requires completion of a research paper, case studies and practice sets. It also requires a considerable amount of computer based instruction. Prerequisites: SAT scores 550 or above, Verbal; 600 or above, Math.

ACCT 212 HONORS ACCOUNTING PRINCIPLES II This course is similar to ACCT 202 except that it emphasizes more conceptual approaches to accounting and requires completion of a research paper, case studies and practice sets. It also requires a considerable amount of computer based instruction. Prerequisites: SAT scores 550 or above, Verbal; 600 or above, Math and ACCT 211.

ACCT 225 BUSINESS LAW I (3) Sources of law and our legal system with particular attention to court jurisdiction, procedure, tort and criminal law, contracts, agency and sales. Not open to students who have taken 0506.325. (UG & G)

ACCT 226 BUSINESS LAW II (3) Law of partnerships, corporations, estates, bankruptcy, government relationships with business, real and personal property, commercial paper and secured transactions. Not open to students who have taken 0506.326. Prerequisite: ACCT 225. (UG)

Upper Division

ACCT 301 INTERMEDIATE ACCOUNTING (3) Fundamental accounting theory as contained in G.A.A.P. An analysis of the concepts of each of the traditional financial statements (balance sheet, income statement, and statement of changes in financial position). Concepts of present value analysis and the concepts of cash and short-term investments. Not open to those students who have taken 0506.301. Prerequisites: ACCT 202 or ACCT 206. (UG)

ACCT 302 INTERMEDIATE ACCOUNTING II (3) An in-depth analysis of inventories, fixed assets, intangibles, and current liabilities, built around an accounting practice case requiring the recording, posting, summarizing and classifying of transactions and the preparation of statements and tax returns. Not open to students who have taken 0506.310. Prerequisite: ACCT 301 and a score above the 55th percentile on the Level I AICPA Test. (UG)

ACCT 303 INTERMEDIATE ACCOUNTING III (3) Fundamental accounting theory as contained in G.A.A.P. as it relates to long-term liabilities, equity; concepts of revenue and expense recog-

niton; and the accounting for leases, pensions, and income taxes. Not open to students who have taken 0506.302. Prerequisite: ACCT 302. (UG)

ACCT 321 ADVANCED ACCOUNTING I (3) This course involves the theory and practice of accounting for branch offices and foreign operations. Not open to students who have taken 0506.312. Prerequisite: ACCT 303. (UG)

ACCT 322 ADVANCED ACCOUNTING II (3) This course involves the theory and practice of accounting for partnerships, installment sales, estates and trusts, municipal accounting, insolvency, and accounting for non-profit organizations. Not open to students who have taken 0506.311. Prerequisite: ACCT 321. (UG)

ACCT 341 COST ACCOUNTING I (3) Components of manufacturing cost under the job order and processing cost system will be discussed. Elements of standard cost accounting, variance analysis and direct cost will be presented. Not open to students who have taken 0506.303. Prerequisites: ACCT 202 or ACCT 206. (UG)

ACCT 342 COST ACCOUNTING II (3) Preparation of budgets and budgetary controls, standard costs and their application will be discussed. Also covers management uses of accounting information through case analyses. Not open to students who have taken 0506.304. Prerequisite: ACCT 341. (UG)

ACCT 361 TAX ACCOUNTING I (3) This course covers federal income tax laws governing gross income, deductions, calculation of taxable income and income tax rates. Emphasis is placed on the effect of these laws on the income of individual tax payers. Not open to students who have taken 0506.305. Prerequisite: ACCT 202 or ACCT 206. (UG)

ACCT 362 TAX ACCOUNTING II (3) This course covers federal income tax laws dealing with partnerships, corporations, special tax areas and State of Maryland income tax laws. Not open to students who have taken 0506.306. Prerequisite: ACCT 361. (UG)

ACCT 401 AUDITING I (3) Auditing standards, internal control, professional ethics, and an introduction to auditing procedures. Not open to students who have taken 0506.313. Prerequisites: ACCT 303 and senior status. (UG)

ACCT 402 AUDITING II (3) This course is a continuation of Auditing I concentrating on auditing procedures, techniques, and standards of reporting. Not open to students who have taken 0506.314. Prerequisite: ACCT 401. (UG)

ACCT 495 INDEPENDENT RESEARCH IN ACCOUNTING Directed research on specific problems in a functional area of accounting. May be re-elected for a maximum total of 6 credits. Prerequisites: Consent of instructor. Special Permit. (UG)

ACCT 497 ACCOUNTING PRACTICUM (3) Students are required to work in assigned projects in actual accounting environments. Priority will be given to seniors. Open to highly qualified juniors. Graded under S/U procedure. May be re-elected for a maximum of 6 credits. Prerequisites: Consent of department chairperson; junior status. (UG)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions

ACCT 601 FINANCIAL ACCOUNTING FOR NON-ACCOUNTANTS (3)

ACCT 701 MANAGERIAL ACCOUNTING FOR NON-ACCOUNTANTS (3)

ADULT EDUCATION (ADED)

Upper Division

ADED 485 [585] ADULT EDUCATION (3) Introduction to the historical and philosophical evolution of adult education in the United States in relationships to current aims, types of programs, and issues. Prerequisite: Consent of instructor. (UG & G)

ADED 487 [587] TEACHING THE ADULT LEARNER (3) Teaching-learning activities at various levels of adult education. The needs,

motivation, and abilities of the adult learner are stressed. Prerequisite: Consent of instructor. (UG & G)

ADED 489 PRINCIPLES OF READING INSTRUCTION FOR ADULTS (3) Causes of adult reading disabilities, evaluation relevant to reading disability, and the methods and materials employed in the remediation process. Prerequisite: Consent of instructor. (UG & G)

AFRICAN-AMERICAN STUDIES (BLST)

Upper Division

BLST 401 AFRO-AMERICAN PERSPECTIVES (3) Afro-American Perspectives is a college credit course combining televised lessons, on-campus seminars, and related workbook assignments. This course focuses upon the experiences of Black people. The course utilizes a multi-discipline format and inter-disciplinary treatment. It is structured around several themes, inquiry into which will encourage scholarly development in an otherwise emotional arena. Prerequisite: Either African History or Black American History or Black American Literature or consent of instructor.

AMERICAN STUDIES (AMST)

Lower Division

AMST 201 INTRODUCTION TO AMERICAN STUDIES (3) This course is designed to show students how they can interpret and understand American culture through a variety of sources, including folkways, film, literature, fine arts, architecture, technology, and popular expression. Course content includes lectures, readings, films. Topic varies. (UG)

Upper Division

AMST 491 DIRECTED READINGS IN AMERICAN STUDIES (3) Independent research in American Studies on a topic selected by the student in consultation with the instructor. Prerequisite: Consent of American Studies Coordinator. (UG)

AMST 497 PRACTICUM IN MATERIAL CULTURE (3) Students will work with members of the curatorial staff at a local museum to learn various museum techniques, examine the collections, and understand the educational and scholarly uses of material culture. A minimum of 80 hours is required. Prerequisites: Consent of American Studies coordinator. (UG)

ANTHROPOLOGY (ANTH)

Lower Division

ANTH 207 CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology; cultural theory, social structure, human ecology, language and culture, technology, religion, art, and literature. (UG)

ANTH 208 HUMAN EVOLUTION AND PREHISTORY (3) The study of man: his biological and cultural development through time. (UG)

ANTH 209 ANTHROPOLOGY OF AMERICAN CULTURE (3) This course applies the anthropological perspective and methodology to the study of the institutions of American culture and the distinctive ways of life encompassed by it. Students will use the perspective in a field work situation of their choice. (UG)

ANTH 210 HONORS CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology. Major social institutions such as politics, economics, religion and social structure will be viewed cross-culturally.

ANTH 211 HONORS ANTHROPOLOGY OF AMERICAN CULTURE (3) This course applies the anthropological perspective and methodology to the study of the institutions of American culture and the distinctive ways of life encompassed by it. Students will use the perspective in a field work situation of their choice. Prerequisite: Admissions to the Honors College Honors Program (UG).

Upper Division

ANTH 321 [521] SEX ROLES IN CROSS CULTURAL PERSPECTIVE (3) Materials from a variety of cultures will be used to illustrate and analyze the roles of women and men within the major institutional aspects—the family, economics, politics and religion. Particular attention will be devoted to the similarities and differences in sex role patterns within and between the cultures. Prerequisite: SOCI 101 or ANTH 207. (UG & G)

ANTH 346 [546] WEALTH, POWER & POLITICS IN CROSSCULTURAL PERSPECTIVE (3) Political systems and the distribution of power in egalitarian, ranked, and stratified societies will be examined. Prerequisite: SOCI 101 or ANTH 207. (UG & G)

ANTH 361 CONTROVERSIES IN ANTHROPOLOGY (3) This course is designed to integrate writing, discussion and visual learning by focusing on a number of significant controversial issues in cultural anthropology. Students will read divergent assessments on each issue under study. In addition, films will be shown which further illuminate the topics. The topics covered will be selected to cover a diverse range of areas including: sociobiology, cannibalism, incest, family organization, sexuality, warfare, competitive feasting, and spirit possession. Prerequisite: ANTH 207. (UG)

ANTH 364 [564] RELIGION, MAGIC AND WITCHCRAFT (3) The world view, beliefs and rituals of selected non-literate peoples considered with reference to religion as a universal category of human culture. Prerequisite: ANTH 207. (UG & G)

ANTH 365 [565] NORTH AMERICAN INDIANS (3) The traditional culture of native North Americans and their socio-cultural place in modern American society will be examined. Prerequisite: ANTH 207. (UG & G)

ANTH 366 [566] SOUTH AMERICAN INDIANS (3) Survey of the cultures of the native peoples of South America in Pre-Columbian times and the situation of contemporary tribal peoples of South America. Prerequisite: ANTH 207. (UG & G)

ANTH 367 [567] PEOPLES OF THE MIDDLE EAST (3) Survey of the Middle East as a cultural area with emphasis on culture change. Prerequisite: ANTH 207. (UG & G)

ANTH 369 [569] TRADITION AND REVOLUTION IN LATIN AMERICAN SOCIETY (3) An anthropological perspective will be brought to bear on contemporary Latin American culture and society. The Pre-Columbian heritage, the traditional synthesis and the struggle to modernize and develop will be examined. Prerequisites: SOCI 101, ANTH 207 or ANTH 208. (UG & G)

ANTH 370-379 [530-539] TOPICS IN ANTHROPOLOGY (3) An examination of current topics in Anthropology designed for non-majors as well as majors. The content of the course will depend upon mutual faculty and student interest. May be repeated when different topic is focus of course. Prerequisite: ANTH 207. (UG & G)

ANTH 381 [581] ARCHAEOLOGICAL METHODS AND THEORY (3) Methods of excavating and recording archaeological data. Investigation of problems of current research interest. Prerequisite: ANTH 207. (UG & G)

ANTH 383 [583] NORTH AMERICAN ARCHAEOLOGY (3) Regional survey of the prehistory of native North American cultures. Prerequisites: ANTH 207 or ANTH 208. (UG & G)

ANTH 385 [585] ARCHAEOLOGY OF THE AMERICAN SOUTHWEST (3) An examination of the evidence of pre-historic cultures of the Southwest: Anasazi, Hohokam, and Mongollon. Detailed description and interpretation of the remains. Prerequisites: ANTH 207 or ANTH 208 and consent of instructor. (UG & G)

ANTH 388 [588] PEASANT CULTURES (3) The course will focus on the rural agricultural population of modern states, their traditional lifeways and the changes being wrought by modernization. Prerequisites: SOCI 101 or ANTH 207. (UG & G)

ANTH 401 [501] ANTHROPOLOGICAL THEORY (3) Survey of the theoretical contributions made by American, British and Continental anthropologists. Prerequisites: ANTH 207 plus nine hours of Anthropology. (UG & G)

ANTH 470-479 [570-579] SPECIAL TOPICS IN ANTHROPOLOGY

(3) An examination of current topics in Anthropology designed for junior and senior majors. The content of the course will depend upon mutual faculty and student interest. May be repeated when different topic is focus of course. Prerequisites: ANTH 207 and six additional hours of Anthropology. (UG & G)

ANTH 491-492 [591-592] PRACTICUM IN ANTHROPOLOGY I, II

(3, 3) Supervised experience in work setting which facilitates understanding of rules and relationships relevant to anthropological inquiry and application of anthropological knowledge. While opportunities to do anthropologically oriented fieldwork in the community will usually be available, placement in agencies dedicated to anthropological inquiry may not always be possible. Students may elect to take one semester for 3 credits (491) or two semesters for 3 credits each (491-492), in one agency for both semesters or in a different agency each semester. No more than three credits may be earned in a semester save with consent of the chair which will be granted only when agency requirements and student needs make it appropriate. A fee is charged for each semester a student is involved in the practicum. Prerequisite: Concentration in anthropology; junior standing and consent of practicum coordinator. (UG & G)

ANTH 495 [595] INDEPENDENT RESEARCH (3)

Supervised research and anthropological investigation leading to preparation of a research project or a supervised field experience. For senior students with a concentration in anthropology. May be repeated when different topic is focus of course. Prerequisites: At least 12 credits in ANTH and consent of department chair. (UG & G)

ANTH 498 READINGS IN ANTHROPOLOGY (Honors) (4)

A survey of the relevant scholarly literature under the guidance of a staff member who will direct the student's research. Prerequisite: Consent of the Honors Coordinator. (UG)

ANTH 499 HONORS THESIS (4)

Supervised research and anthropological investigation involving library and/or field experiences and culminating in a written report. Prerequisite: Consent of the Honors Coordinator. (UG)

ART (ART)**Lower Division****ART 102 DESIGN FOR NON-ART MAJORS (3)**

An introductory studio course in design. Fundamental techniques utilizing a variety of approaches covering two-dimensional design problems. (Does not count for major credit.) (UG)

ART 103 TWO DIMENSIONAL DESIGN (3)

Elements and principles of design as they relate to two dimensional concepts. Form and space problems involving various materials, tools and techniques. (UG)

ART 104 THREE DIMENSIONAL DESIGN (3)

An introduction to three dimensional concepts as they relate to the elements and principles of design. Form and space problems involving various materials, tools, and techniques. Prerequisite: ART 103. (UG)

ART 105 ART IN THE CULTURE (3)

An historical study of art in relation to man's culture; with a strong emphasis on contemporary western culture to include readings, museum visits, and slide lectures covering a broad range of art forms. (UG)

ART 106 DRAWING FOR NON-ART MAJORS (3)

An introductory studio course in drawing. Fundamental techniques utilizing a variety of approaches including the still life and drawing from live models. (Does not count for major credit.) (UG)

ART 107 CERAMICS FOR NON-ART MAJORS (3)

An introduction to the creative possibilities inherent in clay. Studio work in hand-building and the potter's wheel. (UG)

ART 108 STREET ART (3)

Investigation of public (vs. museum or elitist) art from mid-eighteenth century to current times. Philosophy behind propaganda and aesthetics of various political systems will be included. (UG)

ART 109 SCULPTURE FOR NON-ART MAJORS (3)

Basic modeling, casting, carving and construction.

ART 111 DRAWING AND THE APPRECIATION OF DRAWING

I (3) Problems of expressive draftsmanship in a variety of media. Drawing from the costumed and nude figures, still life and landscape. (UG)

ART 113 PAINTING FOR NON-ART MAJORS (3)

An introductory studio course in painting. Fundamental techniques utilizing a variety of approaches and materials. Not open to Art Majors. (UG)

ART 126 FABRIC DESIGN FOR NON-ART MAJORS (3)

A study of design elements and principles using various textile techniques such as embroidery, applique, quilting, and dyeing.

ART 201 COLOR (3)

Fundamentals of color including work in the basic areas of hue, value, intensity and color mixing, as well as projects in color interaction, illusion, complements, after image, additive and subtractive color and types of color contrast. The student should gain some knowledge of color systems, experience in subjective color use, and discover the specific structural and emotional qualities that color can create. Prerequisites: ART 102 or ART 103 or consent of instructor. (UG)

ART 202 ADVANCED DESIGN (3)

The application of aesthetic principles to graphic and plastic problems. Emphasis on independent investigation. Prerequisites: ART 103, ART 104. (UG)

ART 207 HONORS: SEMINAR IN ART HISTORY

Specific historical period/movement or artist, with presentations, critiques, directed readings, and a research paper. Prerequisites: Honors college students with special permit. (UG)

ART 209 HISTORY OF BLACK ART (3)

A study of Black American artists and their works as it relates to American Art. Lecture, discussion, slides, museum and gallery visits. (UG)

ART 211 DRAWING II (3)

Continued studio work in drawing; landscape, still life and figure. Prerequisite: ART 111. (UG)

ART 215 PROJECTIVE DRAWING (3)

Methods of perspective, orthographic and isometric projections. The use of various media in the rendering of three dimensional form. (UG)

ART 220 EXHIBITION TECHNIQUES (3)

The practical and theoretical problems involved in museum and gallery installation of art works. Includes study of past exhibition techniques and observation of contemporary methods. Directed museum trips. Prerequisites: ART 103, ART 104 or consent or instructor. (UG)

ART 221 PREHISTORIC TO MEDIEVAL ART (3)

An historical survey of art. Slide lectures, directed readings and museum trips. (UG)

ART 222 RENAISSANCE TO CONTEMPORARY ART (3)

An historical survey of art. Slide lectures, directed readings and museum trips. Prerequisite: ART 221 or equivalent. (UG)

ART 225 DESIGN FOR VISUAL COMMUNICATIONS I (3)

Drawing, painting, lettering and typography as visual communication. Emphasis is placed on creative problem solving for commercial purposes. Prerequisite: ART 103. (UG)

ART 229 OIL PAINTING AND RELATED MEDIA I (3)

Varied approaches to painting and a variety of media (e.g. acrylic, encaustic, oil painting) are explored through demonstration and experimentation. Prerequisites: ART 103 and ART 111. (UG)

ART 230 WATERCOLOR AND RELATED MEDIA I (3)

Varied approaches to watercolor and a variety of media (e.g. gouache, casein, watercolor) are explored through demonstration and experimentation. Prerequisites: ART 103 and ART 111. (UG)

ART 231 CERAMICS I (3)

Creative investigation of ceramic materials. Studio work, lectures and discussion on ceramic design, techniques and materials. Prerequisites: ART 103, ART 104 or consent of instructor. (UG)

ART 234 PHOTOGRAPHY I (3)

A comprehensive investigation into the technique and aesthetic of still photography. Students must have a camera with adjustable diaphragm and shutter. Prerequisites: ART 103, ART 104 or written consent of instructor. (UG)

ART 240 SCULPTURE: MODELING STUDIO I—THE HUMAN

FIGURE (3) An introduction to the use of the human figure in sculpture with modeling from the nude. Prerequisites: ART 103, ART 104. (UG)

ART 241 SCULPTURE: CONTEMPORARY MEDIA AND CONCEPTS I (3) Lecture and directed studio problems in the aesthetic and technical considerations of current sculptural directions will include a wide selection of sculptural materials, tools, and processes. Prerequisites: ART 103, ART 104. (UG)

ART 242 SCULPTURE: CARVING STUDIO I (3) Technical and aesthetic problems involved in carving stone, wood and other carvable media; studio problems; museum visits. Prerequisite: ART 104. (UG)

Upper Division

ART 301 STAINED GLASS (3) Directed studio problems in stained glass: cutting, foiling, soldering, brass frame and patina. Prerequisites: ART 102 or ART 103 or consent of instructor. (UG)

ART 302 THE ART OF CHINA (3) Painting, sculpture, architecture, porcelain and ritual bronzes of China and peripheral regions. Prerequisites: ART 105 or ART 222 or consent of instructor. (UG)

ART 303 THE ART OF JAPAN (3) Buddhist art and architecture as introduced from China, the arts of later periods, and indigenous art forms. Prerequisites: ART 105 or ART 222 or consent of the instructor. (UG)

ART 305 ARCHITECTURAL CONCEPTS (3) A social-historical examination of the architectural organization of space and materials for human needs. Slides, lectures, discussion, field trips and individual research projects. Prerequisites: one course in art history or consent of instructor. (UG)

ART 309 CERAMICS: THE POTTER'S WHEEL (3) Studio experience in ceramics utilizing the potter's wheel. Assigned problems in wheel throwing with emphasis on utilitarian art forms. Lectures, discussion, and demonstrations. Prerequisite: ART 231. (UG)

ART 310 CERAMIC SCULPTURE (3) Studio experience utilizing a variety of ceramic techniques related to non-utilitarian directions. Assigned problems with emphasis on handbuilding. Lectures, discussion, and demonstrations. Prerequisite: ART 231. (UG)

ART 311 WOOD I (3) Lecture and directed studio problems in designing, cutting, shaping, turning, joining, laminating and finishing hard and soft woods. Both hand and machine tools will be used. Students may elect a sculpture or a crafts option. Prerequisites: ART 104 or consent of instructor. (UG)

ART 313 ENAMELING I (3) Directed studio problems in applying and firing vitreous enamels on metal. Basic techniques of stencil and inlay work are emphasized. Cloisonne, plique-a-jour, champleve will be introduced. Prerequisites: ART 103, ART 104. (UG)

ART 316 WOMEN IN ART (3) Images of women in Western and Non-Western cultures from Prehistoric to the present. Prerequisites: ART 105 or ART 222 or consent of instructor. (UG)

ART 318 JEWELRY (3) Investigation into aesthetics, history, function and design of jewelry. Lecture and directed studio problems in forming, joining, and finishing of metallic and non-metallic materials. Prerequisites: ART 103 and ART 104 or consent of instructor. (UG)

ART 319 [519] METALSMITHING (3) Lecture, demonstration, and directed studio problems in raising, forging, joining, and finishing various metals with emphasis on design and creation of hollowware and flatware. The historic and aesthetic aspects of the media are considered. Prerequisite: ART 318. (UG & G)

ART 320 FIBER CONSTRUCTION (3) Non-loom fiber construction including macrame, twining, coiling, crochet, plaiting and basketry. Functional and non-functional forms and historical and aesthetic considerations included. Prerequisites: ART 103 or ART 104. (UG)

ART 321 VISUAL COMMUNICATION USING COMPUTER GRAPHICS (3) Functions of graphic communication through design utilizing computer systems, software and utilities. Prerequisites: ART 225 and COSC 101. (US)

ART 322 AMERICAN ART (3) Studies of U.S. Architecture and crafts from the colonial period to the present. Slide lectures and museum visits including the Dupont Museum, Winterthur. Pre-

requisites: ART 018 (Mini-mester), or ART 222 or consent of instructor. (UG)

ART 325 [521] DESIGN FOR VISUAL COMMUNICATION II (3) Continued studio in drawing, painting and typography. Advanced assignments in preparing brochures—booklets—for commercial printing. Prerequisites: ART 225 or consent of instructor. (UG & G)

ART 326 FABRIC DESIGN: DYEING (3) Design problems executed in dye on fabric using the resist techniques of batik and tie-dye, in addition to stencilwork and handpainting. Prerequisites: ART 103 and ART 111. (UG)

ART 327 FABRIC DESIGN: PRINTING (3) Technical instruction in block and screen printing on fabric. Design problems include all-over repeat patterns. Prerequisites: ART 103. (UG)

ART 328 WEAVING I (3) Instruction in the basics of handweaving on the loom. Students will experiment with a variety of samplers then plan and execute a final project. Aesthetic and historical aspects of the media are considered. Prerequisites: ART 103, ART 104 or consent of instructor. (UG)

ART 329 OIL PAINTING AND RELATED MEDIA II (3) Continued studio experiences in painting. Prerequisite: ART 229 or consent of instructor. (UG)

ART 330 WATERCOLOR AND RELATED MEDIA II (3) Continued studio experiences in painting. Prerequisite: ART 230 or consent of instructor. (UG)

ART 333 PAPERMAKING (3) Two and three dimensional creative problems in the making of paper. Prerequisites: ART 103 or ART 104. (UG)

ART 334 [534] PHOTOGRAPHY II (3) Continued research with the photographic aesthetic. Emphasis on independent investigation. Student must have camera with adjustable diaphragm and shutter. Prerequisite: ART 234 or written consent of the instructor based on demonstration of technical competence. (UG & G)

ART 335 [535] COLOR PHOTOGRAPHY I (3) An investigation into the use of color and form in still photography through the use of positive and negative transparencies. Prerequisites: ART 234 and ART 334 or equivalent. (UG & G)

ART 338 BLACKSMITHING (3) Studio problems in the use of tools and techniques of forming ferrous metals to produce works of art. Prerequisites: ART 318 or consent of instructor. (UG)

ART 339 METAL SCULPTURE I (3) Lecture and directed studio problems in forging, fabricating, welding, soldering and finishing ferrous and non-ferrous metals. Lecture and directed studio problems in bronze and aluminum lost wax casting, including mold making, investing, pouring and finishing. Prerequisites: ART 240 or ART 241. (UG)

ART 340 SCULPTURE: MODELING STUDIO II (3) Continued studio experiences in modeling the human figure with emphasis on larger figures. A casting experience and written proposal to be included. Prerequisite: ART 240. (UG)

ART 341 SCULPTURE: CONTEMPORARY MEDIA AND CONCEPTS II (3) Continued lecture and directed studio problems in contemporary sculpture. Prerequisites: ART 241 or consent of instructor. (UG)

ART 342 SCULPTURE: CARVING STUDIO II (3) Continued studio experience in carving; individually selected studio problems in area of special interest. Prerequisite: ART 242. (UG)

ART 347 SCREEN PROCESS I (3) Personal expression in traditional and experimental techniques of screen printing: Serigraphy in color, tusche, stencil, glue. Prerequisites: ART 103, ART 111 or consent of instructor. (UG)

ART 349 RELIEF PROCESS I (3) Personal expression in printmaking: Woodcut, wood engraving, linocut, subtractive color printing and other relief processes. Prerequisites: ART 103, ART 111 or consent of instructor. (UG)

ART 350 INTAGLIO PROCESS I (3) Personal expression in printmaking: Etching, drypoint, aquatint, engraving, and other intaglio processes. Prerequisites: ART 103, ART 111 or consent of instructor. (UG)

- ART 351 WRITING ABOUT ART (3)** Expository writing about the visual arts, including critiques, articles, press release, and other formats. Emphasis on effective writing with aesthetic insight. Prerequisites: ENGL 102 or 190; ART 221 or 222 or consent of instructor. (UG)
- ART 353 LITHOGRAPHIC PROCESS I (3)** Personal expression through printing from Litho stones and plates. Prerequisites: ART 103, ART 111 or consent of instructor. (UG)
- ART 371 PRODUCTION TECHNIQUES FOR THE GRAPHIC DESIGNER (3)** Experiences with the tools and methods involved in preparing camera ready art elements for print media and advertising. Prerequisites: ART 225 and one 300 level graphics (printing) course. (UG)
- ART 373 ILLUSTRATION (3)** The application of creative drawing skills in a wide range of media (including pen and ink, watercolor and tempera) to various professional illustration assignments. Editorial, advertising, book, magazine, poster and institutional illustration assignments are covered from concept through presentation. Emphasis is placed on creative interpretation and use of media towards developing a professional portfolio of work. Prerequisite: ART 211. (UG)
- ART 391 RESEARCH IN ART HISTORY (3)** Bibliographic research procedures in Art History. The preparation of publications, including term papers, thesis, reviews and criticism. Study of the provenance and condition of works of art. History of scholars and writing in the field. Prerequisites: ART 221 and ART 222. (UG)
- ART 400 [500] CERAMIC RAW MATERIALS (3)** Lecture and laboratory investigation of ceramic materials as they apply to glazes, clay slips and clay bodies. Tests and problems in ceramic raw materials. Prerequisite: ART 309 or equivalent. (UG & G)
- ART 402 LIFE DRAWING AND ANATOMY I (3)** The study of anatomical structure of the human figure for art students. Drawing from the nude and draped model. Prerequisite: ART 211. (UG)
- ART 405 [505] ART PRINCIPLES AND CRITICISM (3)** Principal concepts of art; theories of perception of aesthetics; application of theories to the interpretation of specific works of art. Prerequisites: ART 105 or ART 221 or ART 222. (UG & G)
- ART 408 [508] ADVANCED CERAMICS (3)** Individually designed studio problems for advanced students in ceramics. Prerequisite: ART 309 or ART 310 or consent of instructor. (UG & G)
- ART 411 WOOD II (3)** Continued lecture and directed studio problems in wood. Prerequisite: ART 311 or consent of instructor. (UG)
- ART 412 LIFE DRAWING AND ANATOMY II (3)** Continued study of anatomical structure of the human figure for Art Students. Emphasis on musculature. Drawing from the nude and draped model. Prerequisite: ART 313. (UG)
- ART 413 [513] ENAMELING II (3)** Continued studio experience in enameling. Emphasis on advanced techniques of cloisonne, pliquejour, independent work, and personal experience are encouraged. Taught concurrently with ART 313. Prerequisite: ART 373. (UG & G)
- ART 414 [514] ADVANCED STUDIO (2-3)** Independent work for advanced students in field of special interest. Prerequisites: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. (UG & G)
- ART 415 [515] ADVANCED STUDIO (2-3)** Independent work for advanced students in field of special interest. Prerequisites: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. (UG & G)
- ART 416 [516] ADVANCED STUDIO (2-3)** Independent work for advanced students in field of special interest. Prerequisites: Must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. (UG & G)
- ART 418 [518] JEWELRY II (3)** Continued studio experiences in jewelry. Directed studio problems in the techniques of casting, fabrication, raising, forging, stone setting, with an emphasis on independent work and personal experience. Prerequisite: ART 318. (UG & G)
- ART 420 FIBER CONSTRUCTION II (3)** Creative problems in two and three dimensional forms using non-loom techniques. Prerequisites: ART 320 or consent of instructor.
- ART 423 [523] PICASSO TO THE PRESENT (3)** Art history with emphasis on painting from 1900 to the present. Slide lectures, directed readings and museum trips. Prerequisites: ART 221 and ART 222. (UG & G)
- ART 424 [524] HENRY MOORE TO THE PRESENT (3)** Art history with emphasis on sculpture from 1900 to the present including new media and happenings. Directed readings and museum trips. Prerequisites: ART 221 and ART 222. (UG & G)
- ART 425 [525] FRANK LLOYD WRIGHT TO THE PRESENT (3)** Art history with emphasis on architecture from 1900 to the present including time-space concepts. Prerequisites: ART 221 and ART 222. (UG & G)
- ART 426 FABRIC DESIGN: DYEING II (3)** Directed and independent studio problems in fabric design: batik, tie-dye, stencilwork, and handpainting.
- ART 427 FABRIC DESIGN: PRINTING II (3)** Continued problems in fabric design with screen printing and block printing on fabric.
- ART 428 [528] WEAVING II (3)** Continued studio experience in weaving. Further investigation into a variety of weaves on various warp threadings with experimentation into color, fiber, and woven forms. Prerequisite: ART 328. (UG & G)
- ART 429 [529] ADVANCED PAINTING: OILS (3)** Individually selected studio problems in oils and related media for advanced students in area of special interest. Prerequisite: ART 329. (UG & G)
- ART 430 [530] ADVANCED PAINTING: WATERCOLOR (3)** Individually selected studio problems in watercolor and related media for advanced students in area of special interest. Prerequisite: ART 330. (UG & G)
- ART 438 METALSMITHING II (3)** Continued studio experiences in silver and copper smithing: raising and forging non-ferrous metals. Prerequisites: ART 319 or consent of instructor.
- ART 439 [539] METAL SCULPTURE II (3)** Continued lecture and directed studio problems in direct or cast metal sculpture. Prerequisite: ART 339. (UG & G)
- ART 440 [540] SCULPTURE: MODELING STUDIO III (3)** Continued studio experience in modeling with the opportunity for advanced students to develop interests in specialized areas. Prerequisite: ART 340. (UG & G)
- ART 442 [542] SCULPTURE: CARVING STUDIO III (3)** Continued studio experience in carving; individually selected studio problems in area of special interest. Prerequisite: ART 342. (UG & G)
- ART 444 [544] BYZANTINE TO GOTHIC ART (3)** Studies in architecture, the decorative arts and sculpture, slide lectures, readings and museum visits. Prerequisite: ART 221. (UG & G)
- ART 445 [545] ITALIAN RENAISSANCE ART: 15th-16th CENTURIES (3)** Studies in architecture, painting and sculpture, slide lectures, readings and museum visits. Prerequisite: ART 222 (UG & G)
- ART 447 [547] SCREEN PROCESS II (3)** Personal expression in screen printing. Continued expression including photo techniques and advanced color printing. Prerequisite: ART 347 or consent of instructor. (UG & G)
- ART 449 [549] RELIEF PROCESS II (3)** Personal expression in relief printing; photo techniques and advance color printing. Prerequisite: ART 349 or consent of instructor. (UG & G)
- ART 450 [550] INTAGLIO PROCESS II (3)** Personal expression in printmaking. Etching aquatint; photo engraving, etc. Prerequisite: ART 449 or consent of instructor. (UG & G)
- ART 453 [553] LITHOGRAPHIC PROCESS II (3)** Personal expression; advanced printing including stone-plate and photo plate. Multiple color printing. Prerequisite: 1001.451 or consent of instructor. (UG & G)

ART 461 [561] ART THERAPY: SURVEY (3) A survey of the concepts and procedures of creative expression in the service of personal understanding and development. Consideration of educational, rehabilitative and psychiatric settings. Lectures, discussions, workshops, and readings. Prerequisite: At least junior standing as a major in Art, Psychology, Health, Mental Health or associated fields. Approved work experience in one of the above fields may be substituted. (Offered evening only) (UG & G)

ART 462 [562] ART THERAPY: OBSERVATION FIELD EXPERIENCE (4.0 credits undergraduate; 3.0 credits graduate) Continuation of Art Therapy I, the work of the therapist. Case studies, observations and participation in a variety of settings. Discussion, field work and readings. Prerequisite: ART 461 or consent of instructor. (Offered spring semester evening only) (UG & G)

ART 471 [571] ART AND ARCHITECTURE OF ANCIENT GREECE (3) The period will extend from the Geometric and Archaic Periods until the close of the Hellenistic Period, with studies in architecture, city planning, the decorative arts and sculpture, slide lectures. Prerequisite: ART 221. (UG & G)

ART 472 ART AND ARCHITECTURE OF THE ROMAN EMPIRE (3) The period will extend from the Republican Era through the reign of Constantine the Great, A.D. 337, with studies in architecture, city planning, the decorative arts and sculpture, with slide lectures and museum visits. Prerequisite: ART 221. (UG)

ART 473 [573] ILLUSTRATION II (3) Continued studio experience in illustration. Developing personal approaches in various media. Emphasis on practicing professional assignments and portfolio preparation. Prerequisite: ART 373 or equivalent. (UG & G)

ART 479 [579] BAROQUE ART AND ARCHITECTURE (3) Studies in the formation of the Baroque style in Italy, and its dissemination in European architecture, painting and sculpture, with slide lectures, selected readings and museum visits. Prerequisite: ART 222. (UG & G)

ART 480 [580] EIGHTEENTH CENTURY ART AND ARCHITECTURE (3) The Rococo, Neo-Classical and Revival styles of the period will be studied and their diffusion in European architecture, painting and sculpture, with slide lectures, selected readings and museum visits. Prerequisite: ART 222. (UG & G)

ART 485 [585] SEMINAR IN ART HISTORY (3) Intensive analysis of a defined historical period or stylistic development in art. Directed reading in both period and contemporary sources. Discussions and museum tours. Variety in content each year, may be re-elected. Prerequisites: ART 221 and ART 222 or consent of instructor. (UG & G)

ART 494 [594] TRAVEL AND STUDY ABROAD (3-6) Countries and topics to be selected by the department and instructors sponsoring the program. For information, contact the Art Department early in the semester preceding the semester of travel study. Prerequisite: Consent of instructor and interview. (UG & G)

ART 499 SENIOR HONORS THESIS (4) Honors in Art History or Art Education—Writing of a standard thesis based on individual research under the direction of a thesis advisor. Honors in Studio Area—An exhibition of work resulting from Honors Studio courses: a supporting paper defining philosophy and purpose written under the direction of a thesis advisor. Prerequisite: Admittance to Art Department Honors Program. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

ART 608 CERAMICS (3)

ART 611 GRADUATE DRAWING I (3)

ART 614-615-616 GRADUATE STUDIO (2-3)

ART 618 GRADUATE JEWELRY I (3)

ART 620 GRADUATE GRAPHIC DESIGN I: TYPOGRAPHY (3)

ART 626 GRADUATE FABRIC DESIGN: DYEING (3)

ART 626 GRADUATE FABRIC DESIGN: PRINTING (3)

ART 629 GRADUATE PAINTING I (3)

ART 630 WATERCOLOR (3)

ART 634 GRADUATE PHOTOGRAPHY I (3)

ART 640 GRADUATE SCULPTURE I (3)

ART 651 GRADUATE INTAGLIO, RELIEF I (3)

ART 653 GRAPHICS: LITHOGRAPHY, SERIGRAPHY (3)

ART 673 GRADUATE ILLUSTRATION I (3)

ART 681 SEMINAR IN ART HISTORY (3)

ART 683 M.F.A. SEMINAR (3)

ART 708 GRADUATE CERAMICS II (3)

ART 711 GRADUATE DRAWING II (3)

ART 715 M.F.A. STUDIO

ART 718 GRADUATE JEWELRY II (3)

ART 720 GRADUATE GRAPHIC DESIGN II: PORTFOLIO (3)

ART 729 GRADUATE PAINTING II (3)

ART 734 GRADUATE PHOTOGRAPHY II (3)

ART 740 GRADUATE SCULPTURE II (3)

ART 750 GRADUATE INTAGLIO, RELIEF II (3)

ART 773 GRADUATE ILLUSTRATION II (3)

ART 770-779 SPECIAL TOPIC: ART HISTORY (3)

ART 795 DIRECTED READING IN ART (3)

ART 897 GRADUATE PROJECT IN ART (3)

ART 898 M.ED. THESIS (3)

ART 899 THESIS CONTINUUM (1)

ART EDUCATION (ARED)

Upper Division

ARED 371 ART AND THE CHILD (2-3) Major considerations of art education appropriate to the work of the elementary teacher; experiences with art materials. (UG)

ARED 373 ART FOR EARLY CHILDHOOD EDUCATION (2) Participation will include lectures, demonstrations, and workshops based on special needs as students experience art in nursery schools, day care centers, kindergartens and the primary grades. Prerequisite: Concurrent registration for Block I, ECED 341. (UG)

ARED 375 MATERIALS AND TECHNIQUES FOR TEACHERS OF ART (3) Art media and the materials and processes of the crafts are structured for varied learning levels. Visits to schools and other art teaching situations as observers and aides are an integral part of the course. Prerequisite: A major in Art Education or consent of the instructor. (Must precede student teaching) (Offered spring semester) (UG)

ARED 455 PRO-SEMINAR IN THE TEACHING OF ART (3) A professional seminar in Art Education majors. Discussion of problems in the current teaching experience. Prerequisite: Permission of Department Chair. Concurrent with student teaching. (Offered spring semester) (UG)

ARED 471 [571] ADVANCED ART EDUCATION (3) Art education problems at all levels; materials and skills in relation to classroom needs. Prerequisite: ARED 371 or equivalent. (UG & G)

ARED 475 TEACHING ART IN THE ELEMENTARY SCHOOL (3) Concurrent course with 479, Art in the Secondary School. For course description see 479. Open only to Art Education Major. Prerequisites: All major art requirements plus ART 225, ART 234, ARED 375, PSYC 201 and SCED 319. (Offered fall semester) (UG)

ARED 477 FIELD EXPERIENCE IN ART EDUCATION (2) Initial field experiences in art teaching and observation under supervision. Prerequisite: Must be taken with ARED 475, 479. (Offered fall semester) (UG)

ARED 479 TEACHING ART IN THE SECONDARY SCHOOL (3) Theoretic basis of art education, the function of the art specialist, and instructional materials and skills. Concurrent course with 475.

Prerequisites: All major art requirements plus ART 225, ART 234, AREC 375, PSYC 201, and SCED 319. (Offered fall semester) (UG)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

ARED 695 RESEARCH IN ART AND ART EDUCATION (3)

ARED 797 SEMINAR IN ART EDUCATION (3)

BIOLOGY (BIOL)

NOTE: Either BIOL 110 (Contemporary General Biology), BIOL 112 (Honors Contemporary General Biology), or BIOL 201 (Biology I) is required as prerequisite for all other biology courses except BIOL 100, BIOL 103, BIOL 171172 and BIOL 173.

Lower Division

BIOL 100 HUMANISTIC BOTANY (3) Selected botanical topics of interest to the non-science major. Topics will include poisonous plants, medicinal plants, plant hallucinogens, tree-ring dating, botanical genetics, bonsai and commercial uses of major plant groups. No credit will be given to those who have completed BIOL 205. (UG)

BIOL 103 HUMAN BIOLOGY (3) Basic principles of human body processes in normal and certain abnormal conditions for non-science majors. The emphasis will be on physiology with sufficient anatomy for its understanding. No credit will be given to those who have completed BIOL 171, BIOL 172, BIOL 213, BIOL 214 or BIOL 311.

BIOL 110 CONTEMPORARY GENERAL BIOLOGY (4) Biological principles common to plants and animals. Topics include cell structure and process (both physical and biochemical), mitosis, gametogenesis, aspects of embryology, genetics, evolution and ecology. Average of two laboratory hours per week. No credit for those who have completed BIOL 201. Not open to those who have completed BIOL 101. (UG)

BIOL 112 HONORS CONTEMPORARY GENERAL BIOLOGY (4) Biological principles common to plants and animals. Topics include cell structure and process (both physical and biochemical), mitosis, gametogenesis, aspects of embryology, genetics, evolution, and ecology. Average of two laboratory hours per week. Not open to those who have completed BIOL 201. Special Permit by Honors College Committee Only. This course will be equated with BIOL 110 for use as a prerequisite or in entering the major. (UG)

BIOL 171 FUNCTIONAL HUMAN ANATOMY I (4) Introduction, histology, musculoskeletal and nervous systems. A basic anatomical and physiological approach emphasizing normal function with a discussion of clinical abnormalities. Designed to be taken concurrently with clinical hospital experience. Average of two laboratory hours per week. To receive credit, BIOL 172 must be completed. Open to affiliated nursing school students only. Not for biology major credit. Prerequisite: Acceptance to affiliated nursing program. (UG)

BIOL 172 FUNCTIONAL HUMAN ANATOMY II (4) Endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems. A basic anatomical and physiological approach emphasizing normal function with a discussion of clinical abnormalities. Designed to be taken concurrently with clinical hospital experience. Average of two laboratory hours per week. Open to affiliated nursing school students only. Not for biology major credit. Prerequisite: BIOL 171. (UG)

BIOL 173 PRINCIPLES OF MICROBIOLOGY (4) General principles of microbiology. Relationship of microorganisms to humans. Basic laboratory techniques. Equal time is devoted to lecture and laboratory. This course is intended for affiliated nursing school students only. Not for Biology Major credit. (UG)

BIOL 201 BIOLOGY I: CELLULAR BIOLOGY AND GENETICS (4) An introduction to biology including biologically important mol-

ecules, cell and tissue structure, respiration, photosynthesis, mitosis, meiosis and genetics. Average of three laboratory hours per week. Prerequisite: CHEM 101 (may be taken concurrently) or one year high school chemistry. Credit not granted for both BIOL 201 and BIOL 110. (UG)

BIOL 202 BIOLOGY II: ORGANISMIC AND POPULATION BIOLOGY (4) Mechanisms which perpetuate life and the interactions and relationships of animals, plants and their environment. Emphasis is placed on the fundamental principles of homeostasis and integration, animal behavior, population and population genetics, communities, evolution, and ecosystems. Average of three laboratory hours per week. Prerequisites: BIOL 201 or BIOL 110 with a grade of B or better. (UG)

BIOL 205 GENERAL BOTANY (4) Plant structure, development, reproduction and diversity of life forms by interrelating hormones, physiological processes and environmental relationships with respect to the whole plant. Emphasis on flowering plants. Average of three laboratory or discussion hours per week. Prerequisites: BIOL 201 or BIOL 110. Not open to those who have completed BIOL 105. (UG)

BIOL 207 GENERAL ZOOLOGY (4) Major animal phyla. A comparative approach to the structure, function, development and ecology of the Animal Kingdom. Average of three laboratory hours per week. Prerequisites: BIOL 202 or BIOL 110. (UG)

BIOL 213 HUMAN ANATOMY AND PHYSIOLOGY I (4) Cell biology, histology, skeletal, muscular, and nervous systems. Average of three laboratory hours per week. To receive credit, BIOL 214 must also be completed. Students who have completed BIOL 109 or 174 may not take this course without departmental approval. Prerequisites: BIOL 201 or BIOL 110. (UG)

BIOL 214 HUMAN ANATOMY AND PHYSIOLOGY II (4) Cardiovascular, respiratory, digestive, excretory, endocrine and reproductive systems. Average of three laboratory hours per week. Students who have completed BIOL 109 or 174 may not take this course without departmental approval. Prerequisite: BIOL 213. (UG)

BIOL 295 COURSE RESEARCH (1) Research related to a specific biology course successfully completed by the student. By invitation or with the consent of the instructor. Not for biology major credit. Prerequisite: BIOL 110. (UG)

Upper Division

BIOL 301 FIELD NATURAL SCIENCE (4) Physical and biological components of various environments and their interrelationships with each other and man. Emphasis on field observation. Average of three laboratory hours per week. Not for credit toward biology major, minor, or M.S. degree in Biology. Prerequisites: BIOL 110 or BIOL 201. (UG)

BIOL 303 [506] LIFE SCIENCES FOR THE ELEMENTARY TEACHER (3) Living organisms in the environment, emphasizing modes of scientific inquiry and the utilization of living organisms in the classroom. Prerequisite: BIOL 110. Not for credit toward biology major, minor or M.S. degree in Biology. (UG & G)

BIOL 305 [505] ELECTRON MICROSCOPY (4) Theory, preparation, and application of the electron microscope, including light microscopy. Average of three laboratory hours per week. Prerequisites: 12 hours of biology, PHYS 211, PHYS 212 recommended, and consent of instructor. (UG & G)

BIOL 307 [507] INTRODUCTION TO PALEONTOLOGY (4) Examination of major forms of life with the emphasis on appearances, diversification, and extinctions during the different geologic periods. Prerequisite: Minimum 10 credits in Biology. (UG & G)

BIOL 310 [510] ENVIRONMENTAL CONSERVATION (4) Conservation practices and problems. Soil, water, forest, and wildlife resources with emphasis on interrelationships. Specialists in various phases of local, state, and federal conservation work conduct or assist in numerous field trips. Average of three laboratory hours per week. Prerequisites: BIOL 110 or 201 and 10 hours of Biology or a combination of 10 hours from biology, geography and physical sciences. (UG & G)

- BIOL 311 [FUNCTIONAL ANATOMY OF HUMANS] (4)** Organ systems of the human with emphasis on physiological processes including integration of these processes from the cellular to organismal level. Average of three laboratory hours per week. No credit for those who have completed BIOL 109, BIOL 174 or BIOL 213-214. Prerequisites: BIOL 207, CHEM 102. (UG)
- BIOL 315 [MEDICAL MICROBIOLOGY] (4)** Pathogenesis of bacterial, viral, rickettsial and fungal diseases with emphasis on medically important bacteria and microbiological techniques. Recommended for students pursuing a career in medical sciences. Prerequisites: BIOL 110 or BIOL 201; CHEM 102 or CHEM 106 (may be taken concurrently). Either this course or BIOL 318 but not both may count toward Biology Major or M.S. degree in Biology. (UG & G)
- BIOL 317 [MICROTECHNIQUE] (4)** Techniques used in preparation of plant and animal tissues for histological examination. Average of three laboratory hours per week. Prerequisites: BIOL 110 or BIOL 201. (CHEM 102 may be taken concurrently.) (UG & G)
- BIOL 318 [MICROBIOLOGY] (4)** Biology of microorganisms with emphasis on bacteria. Microbial morphology, physiology and genetics and the role of microorganisms in natural processes and disease. Laboratory includes methods of observing, isolating and identifying bacteria. Average of three laboratory hours per week. Either this course or BIOL 315 but not both may count toward Biology Major or M.S. degree in Biology. Prerequisites: CHEM 330 or CHEM 331 (may be taken concurrently). (UG & G)
- BIOL 331 [PLANT MORPHOLOGY] (4)** A survey of the plant kingdom with emphases on evolutionary relationships, morphology, and life histories as affected by environmental conditions. A Saturday field trip may be required. Average of three laboratory hours per week. Prerequisite: BIOL 205. (UG & G)
- BIOL 335 [ECONOMIC BOTANY] (3)** Plants and plant products which provide man with various luxuries and necessities. Emphasis will be on higher plants commercially important in North America. Prerequisite: BIOL 205. (UG)
- BIOL 341 [FRESH WATER ALGAE] (4)** Systematics, structure, ecology, physiology, and life histories of fresh water algae. Laboratory will include methods of collection, culture, and experimental study of selected species. Prerequisites: BIOL 205, BIOL 331 recommended. (UG & G)
- BIOL 345 [MYCOLOGY] (4)** Morphology, classification, life histories, and economic applications of the fungi. Average of three laboratory hours per week. Prerequisite: BIOL 205. (UG & G)
- BIOL 347 [MARINE BIOLOGY] (3)** Major features of the marine environment emphasizing biological aspects and specific adaptations of marine organisms. Prerequisites: BIOL 205, BIOL 207. (UG)
- BIOL 349 [MARINE BOTANY] (4)** The ecology, physiology and identification of marine plants emphasizing the Chesapeake Bay and coastal areas of Maryland. Prerequisites: BIOL 347, BIOL 331 strongly recommended. (UG & G)
- BIOL 351 [FIELD AND SYSTEMATIC VERTEBRATE ZOOLOGY] (4)** Evolution, distribution, and definitive features of each class are studied comparatively. Extensive field and laboratory work deals with morphological, taxonomic, ecological, and behavioral features of selected vertebrate groups and species. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)
- BIOL 353 [INVERTEBRATE ZOOLOGY] (4)** Aquatic and terrestrial species of phyla from the Protozoa through the Echinodermata with special emphasis on local forms. Economic, ecological, and taxonomic considerations. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)
- BIOL 355 [ANIMAL PARASITOLOGY] (4)** Major groups of animal parasites and their vectors. Emphasis will be placed on the more important human parasites. Prerequisites: BIOL 214 or BIOL 311. (UG)
- BIOL 360 [HISTOLOGY] (4)** Tissues of the vertebrate body. Prerequisites: BIOL 311 or BIOL 214. (UG & G)
- BIOL 367 [ENDOCRINOLOGY] (3)** Endocrine mechanisms regulating homeostasis and functional integrity of animals with emphasis on vertebrates. Prerequisites: BIOL 214 or BIOL 311, CHEM 102. (UG & G)
- BIOL 371 [ANIMAL BEHAVIOR] (4)** Ethological approach to the comparative study of animal behavior. Major emphases are on the adaptive function of behavior and classification of behavioral mechanisms. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)
- BIOL 381 [BIOLOGICAL LITERATURE] (3)** Familiarization with the literature of biology through the preparation of papers requiring a knowledge of techniques for exploring the literature. Three one-hour lectures per week. Not for major or minor credit or M.S. degree in Biology. Fulfills the advanced writing requirements. Prerequisites: ENGL 102 or 190 (104), at least ten hours of Biology. (UG)
- BIOL 383 [HISTORY OF BIOLOGICAL CONCEPTS] (3)** Historical development of biological concepts from the Renaissance to the present through selected readings. Special emphasis will be placed on the Enlightened Period as signalling the start of a Biological "Scientific Revolution." Not for major credit or M.S. degree in Biology. Prerequisites: BIOL 110 or BIOL 201. (UG)
- BIOL 387 [BIOLOGY IN SOCIETY] (3)** Biological aspects of the environment; its concepts and problems and their effects upon the population. Not for credit toward the biology major, minor or M.S. degree in biology. Prerequisites: BIOL 110 or BIOL 201. (UG)
- BIOL 389 [CURRENT DEVELOPMENTS IN BIOLOGY] (3)** Current directions of research in a major area of the biological sciences. Sufficient background will be given for the appreciation of the significance of these developments. May not be repeated for major credits. Prerequisites: BIOL 205, 207, and consent of instructor. (UG)
- BIOL 401 [GENETICS] (4)** Introduction to genetics including Mendelian genetics, linkage and mapping, nucleic acid structure, replication and function, protein synthesis and the genetic code, mutation, gene regulation in bacteria and viruses, and population genetics. Laboratory includes work with *Drosophila*, fungi, bacteria and viruses. Average of three laboratory hours per week. Prerequisites: BIOL 110 or BIOL 201, CHEM 330 or CHEM 331 (may be taken concurrently). (UG & G)
- BIOL 402 [GENERAL ECOLOGY] (4)** Interrelationship between animals, plants and their natural environments, emphasizing the specific biomes available for study in Maryland. Individual projects will be required. Average of three laboratory hours per week. Prerequisites: BIOL 110 or 201, and either BIOL 202 or 205 or 207. (UG & G)
- BIOL 403 [ADVANCED GENETICS] (3)** Emphasis on the molecular basis of gene action. Discussion of current work and methods related to the problem of gene structure, function, and mutation including the translation and regulation of genetic information. Prerequisite: BIOL 401 or its equivalent. (UG & G)
- BIOL 404 [ECOLOGICAL TECHNIQUES] (3)** Lectures and readings on investigative techniques employed by ecologists in the various specialty fields. An individual investigation, laboratory or field, using appropriate equipment, is required. Prerequisite: BIOL 402 or its equivalent. (UG & G)
- BIOL 406 [LIMNOLOGY] (4)** Physical, chemical, and biological factors that affect fresh-water organisms, and some of the standard methods used to analyze these factors. Average of two laboratory hours per week. Prerequisites: BIOL 205, BIOL 207, BIOL 402 is recommended, CHEM 102, PHYS 212. (UG & G)
- BIOL 408 [CELL BIOLOGY] (4)** The molecular and morphological organization of the cell in relationship to cellular activities with emphasis on eukaryotic cells. Average of three laboratory or discussion hours per week. Prerequisites: BIOL 207; CHEM 330 or CHEM 331. (UG & G)
- BIOL 411 [WILDLIFE BIOLOGY] (4)** Important wildlife species with emphasis on aspects of research and management. Specific techniques and problems are studied in the field. Average of three

hours per week in laboratory and field work. Prerequisite: BIOL 207. (UG & G)

BIOL 413 [513] EVOLUTION (3) Concepts of biological evolution, the history of the development of these concepts, and current topics in evolutionary biology. Prerequisites: BIOL 202 and either BIOL 205 or 207. (UG & G)

BIOL 421 [521] IMMUNOLOGY (3) Fundamental principles of immunology with emphasis on the nature of antibodies and antigens, blood groups, antibody-antigen reactions, hypersensitivity, autoimmunization, tumor immunology, artificial grafting and the preparation of vaccines. Prerequisites: BIOL 315 or 318. (UG & G)

BIOL 425 [525] DISSECTION OF THE UPPER EXTREMITY (2) Gross anatomical dissection of the human upper extremity including the muscles, nerves and blood vessels which supply the appendage. Special emphasis will be placed on development of techniques which assure careful and accurate dissection. Will be offered only in the minimester. Prerequisites: BIOL 213 or BIOL 311 and consent of instructor. (UG & G)

BIOL 427 NEUROMUSCULAR MECHANISMS OF THE UPPER BODY (2) Gross anatomy of the human upper extremity and cranial nerves. Upper extremity emphasis includes muscle action, innervation, and major spinal cord pathways. Olfactory, optic, auditory, and vestibular functions of cranial nerves are stressed. One lecture and two laboratory periods per week. Prerequisites: BIOL 110; BIOL 311 or BIOL 213. (UG)

BIOL 428 VIROLOGY (3) Pathogenesis, morphology, and life cycles of bacterial, animal and plant viruses. Emphasis will be on animal viruses causing disease in humans. Prerequisites: BIOL 315 or 318. (UG)

BIOL 429 [529] BIOANALYSIS (4) Microscopic and biochemical methods used in determining major components and important contaminants of feeds, spices, stabilizers, adhesives, bakery materials, fats and oils, meat products, crystal mixtures, dairy products, etc. An average of two hours per week in laboratory and field work. Prerequisites: BIOL 110 or 201, CHEM 102 (may be taken concurrently). (UG & G)

BIOL 431 [530] HORTICULTURE (4) Plant culture and application to developing desirable plantings on home grounds or in public places with examples of appropriate types of plants for specific situations. Average of three laboratory hours per week. Prerequisite: BIOL 205. (UG & G)

BIOL 432 [532] VASCULAR PLANT TAXONOMY (4) A study of the history and principles of vascular plant systematics with laboratory time devoted to collection and identification of plants in the local flora. An average of three laboratory hours per week. Prerequisites: BIOL 205, BIOL 331 or consent of instructor. (UG & G)

BIOL 433 [533] PLANT SPECIATION (3) Race isolation, hybridity, polyploidy, apomixis, and self-compatibility as they influence the evolution of new populations. Prerequisite: BIOL 205. (UG & G)

BIOL 435 [535] PLANT ECOLOGY (4) Environmental factors and processes which control plant distribution, plant communities, and vegetational biomes of North America. An average of 3 laboratory hours per week with 2 required 3-day weekend field trips and a Saturday field trip emphasizing examples from Maryland and the MidAtlantic States. Prerequisites: BIOL 202 and 205. (UG & G)

BIOL 436 [536] PLANT PHYSIOLOGY (4) Life functions of plants as related to structure at all levels: cells, organs, and the complete organism. Consideration of the interaction of environmental and genetic factors on plant metabolism. Average of three laboratory hours per week. Prerequisites: BIOL 205 and CHEM 102, CHEM 330 recommended. (UG & G)

BIOL 439 [539] PLANT ANATOMY (4) Origin and development of organs and tissue systems in vascular plants. Average of three laboratory hours per week. Prerequisite: BIOL 205. (UG & G)

BIOL 441 [541] PLANT PATHOLOGY (4) Plant diseases, their symptoms, causal agents, etiology, epidemiology, prevention, and control. Average of three laboratory hours per week. Prerequisite: BIOL 205. (UG & G)

BIOL 456 [556] ORNITHOLOGY (4) Systematics, distribution, physiology, behavior and ecology of birds. Emphasis is on bird identification and techniques of studying birds in the field. Several early morning field trips are required. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)

BIOL 458 [558] MAMMALOLOGY (4) Evolution, comparative morphology, systematics, and distribution of mammals. Representative life histories are considered. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)

BIOL 461 [561] ENTOMOLOGY (4) Laboratory and field course in insects. Identification and recognition of the more common families and orders, and a study of their structure, behavior, ecology, economic importance, and control. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)

BIOL [563] ANIMAL EMBRYOLOGY (4) Developmental anatomy and the underlying principles involved in development. This last area will be approached from an experimental base. Average of three laboratory hours per week. Prerequisites: BIOL 214 or BIOL 311. (UG & G)

BIOL 465 [565] MAMMALIAN PHYSIOLOGY (4) Organ systems of mammals with special emphasis on the human. Average of three laboratory hours per week. Prerequisites: BIOL 213, BIOL 214, or BIOL 311; and CHEM 102. (UG & G)

BIOL 467 [567] HERPETOLOGY (4) Systematic survey of the modern reptiles and amphibians. Emphasis is placed on the evolution of morphological and behavioral traits which have enabled the reptiles and amphibians to successfully exploit their individual habitats. Laboratory includes systematic classification, student seminars and field work. Average of three laboratory hours per week. Prerequisite: BIOL 207. (UG & G)

BIOL 469 [569] COMPARATIVE ANIMAL PHYSIOLOGY (4) Functions, interactions, and regulation of organ systems in animals and their roles in sensory perception and integration, movement, oxygen utilization, energy procurement, temperature regulation, and water metabolism. Prerequisites: BIOL 207, CHEM 102. (UG & G)

BIOL 481 [581] DIRECTED READING IN BIOLOGY (1-3) Independent reading in an area selected by the student in consultation with the instructor. Only one credit may be applied toward the Biology Major. May not be applied toward M.S. degree in Biology or the Biology minor. May be repeated for a maximum of 3 credits. Prerequisite: A minimum of ten hours in biology. (UG & G)

BIOL 485 SEMINAR IN MICROBIOLOGY AND CELLBIOLOGY (1) Current Research Articles in Cell Biology and Microbiology are reviewed. May be taken for a maximum of 2 credits. Prerequisites: Twelve credit hours in Biology, including BIOL 315, 318, 401, or 408. (UG)

BIOL 486 BIOLOGY MAJORS SEMINAR (1) Specific topic examined at the molecular, cellular, organismic and ecological levels of organization. Students will be required to present an oral and written report on an aspect of the topic. Prerequisites: Ten hours in biology or consent of instructor, BIOL 202, 205, and 207. (UG)

BIOL 491 INDEPENDENT RESEARCH IN BIOLOGY (2-3) Independent investigation of a problem under the supervision of a staff member culminating in a written presentation. Prerequisite: Prior written consent of instructor who will direct research; 15 hours in biology recommended. May not be used toward Biology minor or M.S. degree in biology. May be repeated for a maximum of 5 credits. (UG)

BIOL 493 INTERNSHIP IN BIOLOGY (3) Practical application of biology in businesses, industries, public and private agencies. Not for major or minor credit. Prerequisites: 2.75 GPA, junior or senior standing, Major in Biology and consent of Biology internship coordinator. Special permit and Co-op fee required. May be repeated once for credit. Grading on a S/U basis. (UG)

BIOL 494 [594] TRAVEL STUDY (1-3) A detailed investigation of field oriented problems in biology away from the Towson State campus. Locations and topics to be selected by the department and instructors sponsoring the program. May be repeated for a

maximum of 3 credits. Prerequisite: BIOL 110 and consent of instructor. (UG & G)

BIOL 495 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student. By invitation or with the consent of the instructor. Not for credit toward the biology minor or M.S. degree in Biology. Prerequisite: BIOL 110. May be repeated once for research related to a different course successfully completed by the student. (UG)

BIOL 498 HONORS RESEARCH IN BIOLOGY (2) Individual research of an extensive nature under the direction of a staff member, culminating in an honors thesis. Credit for BIOL 498 not awarded until BIOL 499 is successfully completed. Prerequisites: open only to advanced honors candidates and by consent of instructor. May not be used toward M.S. degree in Biology. (UG)

BIOL 499 SENIOR THESIS IN BIOLOGY (2) Writing of an honors thesis based on individual research done under the direction of a staff member. Prerequisites: open only to advanced honors candidates and by consent of instructor. May not be used toward M.S. degree in Biology. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

BIOL 601 CURRENT TOPICS IN BIOLOGY (3)

BIOL 605 PROBLEMS IN BIOLOGY (1-3)

BIOL 607 PHYSIOLOGICAL ANIMAL ECOLOGY (4)

BIOL 609 AQUATIC BIOLOGY (4)

BIOL 610 POPULATION AND COMMUNITY BIOLOGY (3)

BIOL 611 BIOCHEMICAL GENETICS (3)

BIOL 613 ANIMAL COMMUNICATION (3)

BIOL 615 PATHOGENIC MICROBIOLOGY (3)

BIOL 621 CELL REGULATION (3)

BIOL 632 PLANT BIOSYSTEMATICS (4)

BIOL 633 PLANT MORPHOGENESIS (3)

BIOL 635 PHYSIOLOGICAL PLANT ECOLOGY (4)

BIOL 641 PRINCIPLES OF PHYSICAL BIOCHEMISTRY (3)

BIOL 651 OSMOREGULATION (3)

BIOL 653 BIOLOGY OF FRESHWATER INVERTEBRATES (4)

BIOL 661 INSECT ECOLOGY (4)

BIOL 681 RECENT ADVANCES IN BIOLOGY (4)

BIOL 701 NON-THESIS LABORATORY RESEARCH (3)

BIOL 703 NON-THESIS LIBRARY RESEARCH (3)

BIOL 797 GRADUATE SEMINAR (1)

BIOL 898 THESIS (3 or 6)

BIOL 899 THESIS CONTINUUM (1)

CHEMISTRY (CHEM)

Lower Division

CHEM 100 CHEMISTRY FOR NON-SCIENTISTS (3) Current and future technological and scientific developments, including such topics as nuclear power, environment, pollution and body chemistry. Three lecture-demonstration hours. Offered each semester. (UG)

CHEM 101 GENERAL CHEMISTRY I (4) Atomic and molecular structure; theories of bonding; stoichiometry; chemical reactions; states of matter; solutions. Laboratory work involves experiments dealing with the determination of physical properties of matter, molecular weights of compounds, stoichiometry, atomic and molecular structure and common types of reactions. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 115 or MATH 119 (either may be taken concurrently). Offered each semester. (UG)

CHEM 102 GENERAL CHEMISTRY II (4) Chemical thermodynamics, equilibrium, kinetics; solutions; acids, bases, and their aqueous equilibria; solubility product; oxidation-reduction and electrochemistry; elements of coordination and nuclear chemistry; chemistry of some important metallic and nonmetallic elements. Laboratory includes: preparation and quantitative analysis of a coordination compound; semimicro qualitative analysis of selected cations and anions. Three lecture hours and one three-hour laboratory period. Prerequisite: CHEM 101. Offered each semester. (UG)

CHEM 105 CHEMISTRY FOR ALLIED HEALTH PROFESSIONS I (4) An introduction to the concepts of general chemistry, including states of matter, atomic structure and periodic table, molecular structure, chemical reactions, intermolecular forces, solutions, buffers and pH, and radioactivity. Laboratory includes data handling and chemical and instrumental techniques. This course may not be used as a prerequisite for the chemistry major program. Three lecture hours and one three-hour laboratory. Prerequisite: MATH 115 or MATH 119 (either may be taken concurrently). Offered each semester. (UG)

CHEM 106 CHEMISTRY FOR ALLIED HEALTH PROFESSIONS II (4) An introduction to organic chemistry and biochemistry using a functional group approach; physical and chemical properties and typical reactions of organic compounds; composition and properties of lipids, carbohydrates, proteins, and nucleic acids, and the role of enzymes, vitamins and hormones. The laboratory introduces the student to simple techniques of synthesis and analysis, including chromatographic and chemical methods. Three lecture hours and one three-hour laboratory. Prerequisite: CHEM 105. Offered each semester. (UG)

CHEM 210 PRINCIPLES AND METHODS OF CHEMICAL ANALYSIS (4) A one semester course in chemical analysis for non-chemistry majors emphasizing the theory and application of common gravimetric, volumetric, chromatographic, spectrophotometric, and electrometric techniques. Two lecture hours, one recitation hour, and four laboratory hours. Prerequisite: CHEM 102. Offered each spring. (UG)

CHEM 211 QUANTITATIVE ANALYTICAL CHEMISTRY (5) Principles and methods of treatment of data pertaining to chemical analysis followed by a development of the theory and techniques associated with common gravimetric, volumetric, and spectrophotometric methods of analysis. Three lecture hours and two three-hour laboratory periods. Prerequisite: CHEM 102. Offered each fall. (UG)

CHEM 295 COURSE RESEARCH (1-3) Principles and methods of treatment of data pertaining to chemical analysis followed by a development of the theory and techniques associated with common gravimetric, volumetric, and spectrometric methods of analysis. (UG)

CHEM 296 COURSE RESEARCH (1-2) Principles and methods of treatment of data pertaining to chemical analysis followed by a development of the theory and techniques associated with common gravimetric, volumetric, and spectrometric methods of analysis. (UG)

Upper Division

CHEM 330 ESSENTIALS OF ORGANIC CHEMISTRY (5) A one semester course in organic chemistry for non-chemistry majors taught on a conceptual basis. Emphasis will be on principles, mechanisms, and modern techniques. Laboratory will include synthesis and identification of organic compounds. Three lecture hours, one recitation hour and one three-hour laboratory period. Prerequisite: CHEM 102. Offered each semester. (UG)

CHEM 331 ORGANIC CHEMISTRY I (5) Structure, stereochemistry, reactions and their mechanisms, preparation and properties of: alkanes, alkenes, alkynes, aromatic compounds, alkyl halides and alcohols. Laboratory techniques include purification, spectroscopic (IR, NMR), and chromatographic (GLPC) methods of identification, and synthesis. Three lecture hours, one hour of laboratory lecture, and one three-hour laboratory period. Prerequisite: CHEM 102. Offered each semester. (UG)

CHEM 332 ORGANIC CHEMISTRY II (5) Structure, reactions and their mechanisms, preparation and properties of: alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines, carbohydrates, etc. Laboratory emphasizes synthetic techniques and modern qualitative organic analysis using chemical reactions and IR, UV, and NMR. Three lecture hours, one hour of laboratory lecture and one three-hour laboratory period. Prerequisite: CHEM 331. Offered each semester. (UG)

CHEM 340 PHYSICAL CHEMISTRY: PRINCIPLES AND APPLICATIONS (3) A survey of physiochemical theory, experimental methods, and applications; thermodynamics, solutions and phases, reaction kinetics, applications of quantum mechanics, and instrumental techniques, illustrating the contributions of physical chemistry to other scientific fields. Three hours lecture/discussion. Prerequisites: CHEM 102, MATH 115 or MATH 119, and PHYS 203 or PHYS 211 or PHYS 241 or equivalent. MATH 273 is strongly recommended. Offered each spring. (UG)

CHEM 341 [542] PHYSICAL CHEMISTRY—THERMODYNAMICS (3) Thermodynamics, phase relations, solution properties, chemical equilibrium and electrochemistry. Three lecture hours. Prerequisites: CHEM 102, MATH 274, and PHYS 242 or PHYS 212 or equivalent. Offered each fall. (UG & G)

CHEM 342 [543] PHYSICAL CHEMISTRY—STRUCTURE AND KINETICS (3) Introduction to quantum chemistry; atomic and molecular structure, atomic and molecular spectroscopy, introduction to statistical thermodynamics, kinetic theory, and chemical kinetics. Three lecture hours. Prerequisites: CHEM 102, MATH 274, and PHYS 222 or PHYS 242 or PHYS 212 or equivalent. Offered each spring. (UG & G)

CHEM 343 [544] PHYSICAL CHEMISTRY LABORATORY I (2) Laboratory projects in physical chemistry and discussion of experimental techniques. One lecture hour and one three-hour laboratory period. Prerequisites: CHEM 210 or CHEM 211 and CHEM 340 or CHEM 341 or CHEM 342. Offered each spring. (UG & G)

CHEM 344 [545] PHYSICAL CHEMISTRY LABORATORY II (2) Laboratory projects in physical chemistry and discussion of advanced experimental techniques. One lecture hour and one three-hour laboratory period. Prerequisites: CHEM 211 and CHEM 341 or CHEM 342. Offered each fall. (UG & G)

CHEM 350 [551] PRINCIPLES OF BIOCHEMISTRY (5) Introduction to Biochemistry. Discussion of protein structure, enzyme kinetics and enzyme catalysis. Survey of intermediary metabolism of carbohydrates. Discussion of lipid structure, lipid metabolism and membranes. The laboratory will introduce modern methods of biochemistry: electrophoresis, enzyme kinetics and enzyme isolation and purification. Three lecture hours and one four-hour laboratory period. Not recommended for Chemistry majors. Prerequisite: CHEM 330 or CHEM 332. Offered each fall. (UG & G)

CHEM 355 BIOCHEMISTRY (3) Structure and function of biopolymers: proteins, nucleic acids and carbohydrates. Mechanisms of enzyme action, including coenzyme catalyzed reactions. Biological membranes. Enzyme kinetics, and bioenergetics. Intermediary metabolism and its regulation. Three lecture hours. Prerequisites: CHEM 211, CHEM 332, either CHEM 341 or CHEM 342. Not open to students with credit for CHEM 353. Offered each spring. (UG)

CHEM 356 BIOCHEMISTRY LABORATORY (2) Physical methods in biochemistry, including spectrophotometry, centrifugation and ultra-centrifugation, electrophoresis and chromatography. Isolation and purification of proteins and nucleic acids. Enzyme kinetics, and the binding of small molecules to macromolecules. One lecture hour and one three-hour laboratory period. Prerequisites: CHEM 355 (may be taken concurrently). Not open to students with credit for CHEM 353. Offered each spring. (UG)

CHEM 361 [562] CHEMICAL AND BACTERIOLOGICAL STUDIES ON WATER POLLUTION (3) Deals mainly with water pollution: causes, effects, and cures. Considers details of water and waste treatment. Emphasizes technical details of analysis of water. Concerns standards of water purity and variables involved. Demonstration of analytical methods to be given. Case studies and applications are viable approaches to this topic. Three lecture hours.

Prerequisites: CHEM 102 and BIOL 110. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 363 [564] CHEMISTRY OF DANGEROUS DRUGS (3) A study of the chemistry, methods of detection and analysis of narcotics, depressants, stimulants and hallucinogens. Also, the influence of physiochemical properties upon the pharmacological effects of drug receptor interactions. Historical, forensic, and socio-economic implications associated with drug abuse will also be reviewed. Three lecture hours. Prerequisites: CHEM 330 and CHEM 350 or CHEM 331-332. CHEM 210 or CHEM 211 recommended. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 365 [566] POLYMER CHEMISTRY (3) Course will cover the following aspects of polymers: structure, physical properties, methods of preparation, rheology, mechanical properties, degradation and stabilization, application and fabrication, and related contemporary topics. Carbon chain and heterochain polymers will be discussed, and spectroscopic methods of analysis (IR, UV and NMR) will be presented. Three lecture hours. Prerequisites: CHEM 101, CHEM 102, CHEM 331 and CHEM 332. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 367 [568] FORENSIC CHEMISTRY (3) An introduction to chemical and physical analyses used by a modern crime laboratory in the evaluation of physical evidence encountered in criminal acts. Areas of concentration will include drug analysis, toxicology, forensic serology, explosives analysis, arson examination, firearms and tool marks and trace evidence. Emphasis will be placed on the value of such examinations as presented by the expert witness in a criminal trial. Three lecture hours. Prerequisites: CHEM 101, CHEM 102, CHEM 210 or CHEM 211, CHEM 330 or CHEM 332. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 369 [570] ORGANOMETALLIC CHEMISTRY (3) A survey of the chemistry of compounds containing carbon-metal bonds. Synthesis, reactions and structures of compounds such as metal alkyls, carbonyls, pi-complexes, and the uses of these compounds in synthesis will be considered. Three lecture hours. Prerequisites: CHEM 331, CHEM 332; CHEM 423 recommended. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 371 [572] SPECTROMETRIC METHODS IN CHEMISTRY (4) This course deals with the theory and application of three of the major instruments used in chemistry today: nuclear magnetic resonance spectroscopy, infrared spectroscopy, and mass spectrometry. Emphasis will be on the practical use of the instruments in pure and applied chemical investigations involving students in the actual operation of the instruments. Two lecture hours and four laboratory hours. Prerequisites: CHEM 332 and consent of instructor. Offered through College of Continuing Studies (evening and summer) if sufficient demand. (UG & G)

CHEM 373 CHEMICAL AND LABORATORY SAFETY (1) A survey will be presented of laboratory precautions, of hazards in laboratory resulting from reactions, and of toxicities. Emphasis will be placed on prevention of problems and on where safety information can be acquired. Prerequisites: CHEM 101, CHEM 102, and either CHEM 330 or CHEM 332, and consent of instructor. (UG)

CHEM 383 [584] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS I (3) Survey of principles and applications of chemistry for secondary school teachers. Lecture: chemical reactions, stoichiometry, atomic structure, and theories of chemical bonding. Laboratory: an examination of experiments suitable for the secondary school curriculum with emphasis upon laboratory safety. Two lecture hours and two hours of laboratory-discussion. Prerequisite: high school algebra, experience as secondary school teacher, and consent of instructor. (UG & G)

CHEM 384 [585] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS II (3) Survey of principles and applications of chemistry for secondary school teachers. Lecture: properties of solutions, acid/base theories, reaction kinetics, chem-

- ical equilibrium, thermodynamics, states of matter, and nuclear chemistry. Laboratory: an examination of experiments suitable for the secondary school curriculum with emphasis upon laboratory safety. Two lecture hours and two hours of laboratory-discussion. Prerequisite: CHEM 383 or CHEM 584 and consent of instructor. (UG & G)
- CHEM 385 [586] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS III (3)** Experimental chemistry for secondary school teachers: principles of laboratory measurements, design of experiments, obtaining and interpreting experimental data, laboratory techniques and instrumentation. Two lecture hours and two hours of laboratory-discussion. Prerequisite: CHEM 384 or CHEM 585 and consent of instructor. (UG & G)
- CHEM 386 [587] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS IV (3)** Survey of principles and applications of physical chemistry for secondary school teachers. Chemical thermodynamics, descriptions of solutions, kinetic theory of gases, reaction rates and mechanisms, and introduction to quantum mechanics. Three lecture hours. Prerequisite: CHEM 385 or CHEM 586 and consent of instructor. (UG & G)
- CHEM 386 [588] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS V (3)** Organic chemistry for secondary school teachers. Functional groups, reaction mechanisms, natural products. Simple and complex techniques of purification, analysis, and synthesis. Three lecture hours and one hour of laboratory. Prerequisite: CHEM 386 or CHEM 587 and consent of instructor. (UG & G)
- CHEM 388 [589] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS VI (3)** Principles and applications of biochemistry for secondary school teachers. Structures and functions of biological molecules, enzymes, metabolic energies, and nucleic acids. Three lecture hours. Prerequisite: CHEM 387 or CHEM 588 and consent of instructor. (UG & G)
- CHEM 389 [590] MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS VII (3)** Modern instrumental methods for secondary school teachers. An integrated laboratory-lecture course discussing four major instrumental methods and their uses in solving typical chemical problems: spectrophotometry, nuclear magnetic resonance spectroscopy, mass spectrometry, and chromatography. Two lecture hours and two hours of laboratory-discussion; short field trips may be required. Prerequisite: CHEM 388 or CHEM 589 and consent of instructor. (UG & G)
- CHEM 391-394 [501-504] SPECIAL PROBLEMS IN CHEMISTRY (1-3)** A laboratory or library problem in chemistry to be selected by the student in consultation with the instructor. Students are required to submit a written report. May be repeated for credit as CHEM 392, CHEM 393, etc. Prerequisite: Written consent of instructor. Offered each semester. (UG & G)
- CHEM 395 PRACTICUM IN CHEMISTRY (1-3)** Students will be given credit in this cooperative education program for approved experience in Chemistry. A written final report will be submitted by student. Performance to be graded as satisfactory (grade of S) or unsatisfactory (grade of U). May be repeated for credit as CHEM 396, etc.; maximum: six credits total. Prerequisites: CHEM 211, CHEM 332, and consent of instructor. Offered each semester. (UG)
- CHEM 401 [500] SEMINAR IN CHEMISTRY (1)** An introduction to chemical literature. Attendance at all seminars and presentation of seminars to the Chemistry Department on topics selected by the Chemistry faculty or selected by the student and approved by the faculty. One and one-half hour seminar period. Prerequisites: CHEM 211, CHEM 332; Corequisite: CHEM 341 or CHEM 342. Offered each semester. (UG & G)
- CHEM 413 THEORY OF INSTRUMENTAL ANALYSIS (3)** A discussion of spectroscopic, chromatographic and electrochemical systems, their design and their application to chemical analysis. Three lecture hours. Prerequisites: CHEM 211 and CHEM 341 or CHEM 342. Not open to students with credit for CHEM 411. Offered each fall. (UG)
- CHEM 415 INSTRUMENTAL ANALYSIS LABORATORY (2)** Experiments illustrate the application of spectroscopy, chromatography and electrochemistry to the solution of real problems in chemical analysis. Five laboratory hours. Prerequisite or co-requisite: CHEM 413. Not open to students with credit for CHEM 411. Offered each spring. (UG)
- CHEM 417 [518] ADVANCED ANALYTICAL CHEMISTRY (3)** A special topics course dealing with the theory and application of more recent and specialized techniques of chemical separation and analysis. Three lecture hours. Prerequisites: CHEM 415 or CHEM 411. Not open to students with credit for CHEM 412. (UG & G)
- CHEM 423 INORGANIC CHEMISTRY (3)** Atomic structure; valence bond and molecular orbital theories of bonding; symmetry concepts; syntheses, structures, and reactions of typical compounds of the representative and transition elements, including organometallic compounds; ligand field theory; special topics. Three lecture hours. Prerequisites: CHEM 211, CHEM 332 and CHEM 341 (may be taken concurrently) or CHEM 342 (may be taken concurrently). Not open to students with credit for CHEM 422. Offered each fall. (UG)
- CHEM 424 INORGANIC CHEMISTRY LABORATORY (2)** Techniques of synthesizing and characterizing inorganic compounds. Types of compounds will include coordination compounds, non-metallic compounds, volatile hydrides, and organometallics. Synthetic techniques will include inert atmosphere techniques, vacuum line, non-aqueous solvents, high temperature synthesis, etc. One lecture hour and one three-hour laboratory period. Prerequisites: CHEM 211, CHEM 332 and CHEM 423 (may be taken concurrently). Not open to students with credit for CHEM 422. Offered each fall. (UG)
- CHEM 431 [534] ADVANCED ORGANIC CHEMISTRY LABORATORY (3)** The design of organic synthesis, advanced laboratory techniques, and determination of structure by chemical and spectroscopic means will be taught by laboratory problems and discussion. One lecture hour and six laboratory hours. Prerequisite: CHEM 332 and consent of instructor. (UG & G)
- CHEM 432 [535] ADVANCED ORGANIC CHEMISTRY (3)** Advanced topics will include several of: molecular orbital theory, pericyclic reactions, photochemistry, and determination of reaction mechanisms by: kinetics, linear free energy relationships, acid-base properties, acid-base catalysis, detection of intermediates, stereochemistry, etc. Three lecture hours. Prerequisites: CHEM 332 and CHEM 342; CHEM 341 is recommended. (UG & G)
- CHEM 441 [546] ADVANCED PHYSICAL CHEMISTRY (3)** Two topics in the area of Physical Chemistry to be covered in depth. Topics will be selected by the instructor after consultation with the students. Examples of possible topics are: formal wave mechanics, bonding, solid state, liquid state, surface chemistry, colloids, high polymers, rheology, ionic conductivity, electrochemical cells, scattering phenomena, statistical thermodynamics. Three lecture hours. Prerequisites: CHEM 341 and CHEM 342. (UG & G)
- CHEM 452 [554] ADVANCED BIOCHEMISTRY (3)** The use of physical methods in the study of biochemical systems, biochemical thermodynamics; the structure of proteins including X-ray crystallography, macromolecular solution thermodynamics, enzyme kinetics, and spectroscopic probing of macromolecular structure will be discussed. Three lecture hours. Prerequisites: CHEM 353 or CHEM 355. (UG & G)
- CHEM 453 ADVANCED BIOCHEMISTRY LABORATORY (2)** Basic laboratory techniques involving the synthesis, isolation, purification, identification, and further reactions of substances in biochemical systems. Two three-hour laboratory periods. Prerequisites: CHEM 353 or CHEM 356. (UG & G)
- CHEM 461 FOURIER TRANSFORM NUCLEAR MAGNETIC RESONANCE (2)** Measurement and use of chemical shift, coupling constants, relaxation times and nuclear Overhauser effects to obtain chemical information for selected nuclei. Pulsed Fourier transform data acquisition and manipulation and the optimization of spectral parameters. Special problems encountered with quadrupolar nuclei, negative gyromagnetic ratio, paramagnetic materials, large molecules and solids and some solutions to them. Multiple pulse techniques. 25 Lecture hours and 10 lab hours per

semester. Prerequisites: CHEM 332, CHEM 413, and PHYS 212 or or PHYS 242 or equivalent; or consent of instructor. (UG)

CHEM 491-494 [505-508] INTRODUCTION TO RESEARCH IN CHEMISTRY (1-3) An individual laboratory and/or library investigation in research interest of an instructor. May be repeated for credit as CHEM 492, CHEM 493, CHEM 494, etc. At the completion of a project the student must write a formal research paper on the work done and the principles involved. The student's performance will be evaluated by the research director and selected members of the faculty; performance to be graded as satisfactory (grade of S) or unsatisfactory (grade of U). Prerequisite: Consent of instructor. Offered each semester. (UG & G)

CHINESE (CHNS)

Lower Division

CHNS 101-102 ELEMENTARY MODERN CHINESE I, II (3, 3) An introduction to standard modern Chinese (Mandarin). Emphasis is on reading and writing of Chinese. Pin Yin, the phonetic system of pronouncing Chinese words is introduced. Text, sound tape and vocabulary cards. (UG)

CHNS 201-202 CHINESE INTERMEDIATE I, II (3,3) Thorough review of Elementary Chinese; vocabulary building; conversational fluency and prose composition; translation; reading and discussion of selected outside reading (newspapers, magazines, Chinese literature). (UG)

COMMUNICATION SCIENCES & DISORDERS (SPPA)

Lower Division

SPPA 105 SPEECH AND LANGUAGE DEVELOPMENT (3) Analysis of normal speech and language development, including the phonetic, semantic, and syntactic elements. Physiology of speech and language learning. Observation will be required. (UG)

SPPA 106 VOICE AND DICTION (3) Analysis of articulatory and vocal usage as they relates to spoken language. Improvement of skills in voice, articulation, and pronunciation. (UG)

SPPA 205 BASIC SIGN LANGUAGE (3) Principles and techniques for developing language in the communicatively impaired. Focus will be skill development in basic manual communication as a function of the English language and its application with hearing impaired and multiple handicapped populations. Participation and demonstration will be required. (UG)

SPPA 206 INTERMEDIATE SIGN LANGUAGE (3) The course will emphasize receptive and expressive conversational skills. Class will be conducted in a silent classroom (no voices allowed). Fingerspelling rate and fluency will be stressed. Non-verbal communication skills and basic interpretive practice will be provided. Discussions of the Registry for Interpreters for the Deaf (RID) and Deaf Awareness will be included. Prerequisite: SPPA 205 or consent of instructor. (UG)

SPPA 210 PHONETICS OF AMERICAN ENGLISH (3) Analysis of speech sounds of American English and the use of phonetic symbols to record them. Emphasizes ear training, phonetic transcription, and language recordings. (UG)

SPPA 213 GENERAL SEMANTICS (3) The effects of language and symbols upon individual adjustment and maladjustment. (UG)

Upper Division

SPPA 300 ANATOMY AND PHYSIOLOGY OF THE AUDITORY AND VOCAL MECHANISM (3) Anatomical structures involved in the communication processes of Speech, Language, and Hearing. Analysis of the functioning of these structures. Lectures and laboratory sessions will be required. Prerequisite: SPPA 105 (UG)

SPPA 301 HEARING AND SPEECH SCIENCE (3) Physical and psychological parameters of speech and hearing with inclusion of acoustics and instrumentation. Prerequisite: SPPA 105, or consent of instructor. (UG)

SPPA 302 SPEECH AND LANGUAGE PATHOLOGY I: PHONOLOGY (3) Theories of phonological development and clinical appreciation of current linguistic analysis techniques in description of articulation and other phonological disorders. Standardized testing procedures and treatment program development. Prerequisite: SPPA 301 or consent of instructor. (UG)

SPPA 304 SPEECH AND LANGUAGE PATHOLOGY II: LANGUAGE (3) Interaction of normal language development and language disorders including psycholinguistics, semantic development, information processing and auditory memory. Prerequisite: SPPA 301 or consent of instructor. (UG)

SPPA 305 STUTTERING—ETIOLOGY AND THERAPY (3) Analysis of etiologies, symptoms and therapeutic management of stuttering. Prerequisite: SPPA 105. (UG)

SPPA 306 SPEECH AND LANGUAGE PATHOLOGY III: ORGANIC DISORDERS (3) Etiology, differential diagnosis and therapeutic management in the area of organic and functional voice problems, cleft lip and palate, adult aphasia, cerebral palsy and mental retardation. Prerequisites: SPPA 302 and SPPA 304. (UG)

SPPA 311 TECHNICAL WRITING IN SPEECH/LANGUAGE PATHOLOGY AND AUDIOLOGY (3) Development of the student's expository writing Language Pathology and Audiology. Prerequisites: SPPA 302; ENGL 102 or ENGL 190 (104) (cannot be taken concurrently). (UG)

SPPA 321 INTRODUCTION TO AUDIOLOGY (3) Anatomy, physiology and pathologies of the hearing mechanism. Instrumentation and techniques for the identification and management of hearing disorders inclusive of pure-tone and speech audiometrics and screening methods. Prerequisite: Major standing, or consent of instructor. (UG)

SPPA 341 CLINICAL AUDIOLOGY (3) Basic audiometry; audiogram interpretation; basic principles of audiologic habilitation including school hearing conservation. Prerequisite: SPPA 321, or consent of instructor. (UG)

SPPA 431 IDENTIFICATION AUDIOMETRY (3) Rationales and techniques for identifying auditory disorders in various populations and environments. Prerequisite: Consent of instructor. (UG)

SPPA 470-479 [570-579] SPECIAL TOPICS SEMINAR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3) Investigation of particular topics in the fields of speech and language pathology and audiology. The topic will vary each semester the course is offered. Prerequisite: Varies with topic. (UG & G)

SPPA 486 CLINICAL OBSERVATIONS AND TECHNIQUES (3) Observation and application of techniques related to the management of hearing, language, and speech disorders. Prerequisites: SPPA 302, SPPA 304. (UG)

SPPA 487 CLINICAL PRACTICUM I (3) Clinical practice in therapeutic procedures with various types of speech, language and/or hearing disorders in the Towson State University Speech/Language/Hearing Clinic. (Repeatable once. Must be taken second time if SPPA 488 is not elected.) Students must attend weekly class. Prerequisite: SPPA 486 and/or consent of chair. (UG)

1220.489 CLINICAL COUNSELING IN COMMUNICATION DISORDERS (3) Systems of directive and non-directive counseling utilized by speech and hearing clinicians. Techniques of interviewing, case history recording, and the conditioning of semantic reactions through interpersonal interaction. Prerequisite: SPPA 486. (UG)

SPPA 496 INDEPENDENT STUDY IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (1-4) Independent study in selected areas of Speech-Language Pathology and Audiology. Prerequisites: Invitation of Department only and upper division standing. May be repeated for a maximum of 6 credits. (UG)

SPPA 497 DIRECTED READINGS IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (1-4) Directed readings in selected areas of Speech Pathology and Audiology. Prerequisites: Upper division standing and by invitation of the department. May be repeated for a maximum of 6 credits. (UG)

SPPA 498 PROCTORING IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3) Students serve as teaching apprentices or proctors in a course which they have already completed in the Department. May be repeated for a maximum of 6 credits. Prerequisites: Successful completion with a grade of "B" or better of the course which the student is to proctor and consent of the instructor. (UG)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

SPPA 601 SEMINAR IN LANGUAGE DISORDERS OF CHILDREN (3)

SPPA 605 NEUROPATHOLOGIES OF SPEECH (3)

SPPA 607 DIAGNOSTIC METHODS IN SPEECH PATHOLOGY (3)

SPPA 609 NONVOCAL COMMUNICATION FOR THE DISABLED (3)

SPPA 611 SEMINAR IN APPLICATION OF LINGUISTICS TO SPEECH PATHOLOGY (3)

SPPA 612 AURAL HABILITATION/REHABILITATION (3)

SPPA 613 RESEARCH DESIGN SEMINAR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (1)

SPPA 615 VOICE DISORDERS: ETIOLOGY, DIAGNOSIS, TREATMENT AND RESEARCH (3)

SPPA 617 PHONOLOGICAL DISORDERS: DIAGNOSIS AND TREATMENT (3)

SPPA 618 EXPERIMENTAL PHONETICS (3)

SPPA 619 CURRENT ISSUES IN STUTTERING SEMINAR (3)

SPPA 621 SEMINAR IN DIAGNOSIS OF DISORDERS OF THE AUDITORY SYSTEM (3)

SPPA 631 SEMINAR IN PSYCHOACOUSTIC INSTRUMENTATION AND CALIBRATION (3)

SPPA 643 SEMINAR IN NEUROBIOLOGIC ASPECTS AND ASSESSMENT OF THE AUDITORY SYSTEM (3)

SPPA 644 AUDIOLOGY SEMINAR—CURRENT TOPICS IN AUDITION (3)

SPPA 651 INDUSTRIAL AND ENVIRONMENTAL AUDIOLOGY (3)

SPPA 653 PEDIATRIC AUDIOLOGY (3)

SPPA 655 HEARING AID SELECTION PROCEDURES (3)

SPPA 661 DIALECTS OF ETHNIC GROUPS IN AMERICAN SOCIETY (3)

SPPA 670-679 SPECIAL TOPICS SEMINAR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

SPPA 690 CLINICAL PRACTICUM (1)

SPPA 701 SEMINAR IN LANGUAGE AND COGNITION (3)

SPPA 702 COMMUNICATION DISORDERS IN MENTAL RETARDATION SEMINAR (3)

SPPA 705 PROFESSIONAL ISSUES IN SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY

SPPA 745 ADVANCED CLINICAL PRACTICUM (1)

SPPA 746 ADVANCED CLINICAL PRACTICUM-OFF-CAMPUS.

SPPA 795 GRADUATE RESEARCH PAPER IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3)

SPPA 796 INDEPENDENT STUDY IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3)

SPPA 797 DIRECTED READINGS IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3)

SPPA 898 THESIS (3)

SPPA 899 THESIS CONTINUUM (1)

COMPUTER SCIENCE (COSC)

Lower Division

COSC 101 COMPUTERS AND SOCIETY (3) A survey of Computer Science for non-majors including a history of computing, an overview of computer organization and programming, and the social impact of computers. Applications such as business data processing, information management, computer aided instruction, process control, and simulation will be discussed. Projects will be chosen from various application areas. (UG)

COSC 115 INTRODUCTION TO INFORMATION SYSTEMS (4) Survey of computer and information sciences: history of computing, an overview of computer organization, programming, systems analysis and design, and productivity applications; with emphasis on business topics. Additional independent laboratory work is required. (UG)

COSC 165 FUNDAMENTALS OF COMPUTING (3) A first course in computing to provide the student with the requisite knowledge and experience to use computers effectively in the solution of numeric and non-numeric problems. Two lecture hours and two laboratory hours. Prerequisite: Two years of high school algebra or equivalent. (UG)

COSC 212 INTRODUCTION TO BUSINESS PROGRAMMING (3) A study of computer programming for business applications using a language such as COBOL. Students will design, implement, test and document programs in application areas such as payroll, accounting, inventory, and file maintenance. Not open to those who completed COBOL PROGRAMMING. Prerequisite: COSC 115 or programming experience. (UG)

COSC 221 PROGRAMMING IN APL (1) Syntax and usage of the APL programming language; primitive functions; operators; function definition; branching and looping; workspace operations; file operations; selected applications. Prerequisite: Knowledge of one other high level programming language. (UG)

COSC 223 PROGRAMMING IN BASIC (1) Syntax and usage of the BASIC programming language; data types, variables, control structures, arrays, subprograms; file and file handling; elementary graphics; selected applications. Prerequisite: Knowledge of one other high level programming language. Not open to those who have completed COSC 165. (UG)

COSC 225 PROGRAMMING IN PASCAL (1) Syntax and usage of the Pascal programming language; data types and structures, variables, pointers; control structures; procedures and functions; files and file handling; selected applications. Prerequisite: Knowledge of one other high level programming language. Not open to those who have completed COSC 236. (UG)

COSC 227 PROGRAMMING IN FORTRAN (1) Syntax and usage of the FORTRAN programming language; data types, control structures; arrays, subprogramming; file handling; selected applications. Prerequisite: Knowledge of one other high level programming language. Not open to those who have completed COSC 306. (UG)

COSC 236 STRUCTURED PROGRAMMING (3) A course in problem-solving and the design of computer programs with emphasis on programming style and a systematic approach to problem-solving. The various aspects of a specific language will be studied. Students will solve a wide variety of problems and implement them on the computer. The problems will employ arrays, sub-routines and functions, character manipulation, and input/output operations. Not open to those who completed COSC 306. Prerequisite: COSC 165 or consent of instructor. (UG)

COSC 280 ASSEMBLY LANGUAGE PROGRAMMING (3) Introduces the basic concepts of programming systems including computer structure, machine language, assembler language, addressing techniques, macros and program segmentation and linkage. Prerequisite: COSC 236 or programming experience. (UG)

Upper Division

COSC 306 STRUCTURED PROGRAMMING FOR THE SCIENCES (3) A course in problem solving methods and the design of com-

- puter programs for mathematics and the sciences with an emphasis on programming style and a systematic approach to problem solving. Students will solve a wide variety of problems using a scientific programming language. Not open to those who completed COSC 236 or Introduction to Computer Science I (COSC 337). Prerequisites: COSC 165 and MATH 273 (may be taken concurrently). (UG)
- COSC 335 [515] ADVANCED BUSINESS PROGRAMMING (3)** A course in advanced programming concepts for business applications. Topics to be covered include the report writer feature, table handling, sorting, direct access files, program segmentation, and job control language. Students will work on several case studies and programming projects. Prerequisite: COSC 212. (UG & G)
- COSC 336 [516] DATA STRUCTURES AND SORTING TECHNIQUES (3)** An introduction to data structures such as lists, trees and graphs and their implementation. Algorithms for efficient searching, sorting, insertion, and deletion will be investigated. The implications of storage media characteristics and file organization and manipulation will be studied. Prerequisites: COSC 236 or consent of instructor. (UG & G)
- COSC 338 [518] COMPUTER ORGANIZATION (3)** A study of computer architecture, arithmetic and basic logic design will provide an understanding of the mechanics of information transfer and control within the computer system. Prerequisite: COSC 280 and MATH 263. (UG & G)
- COSC 339 [519] OPERATING SYSTEMS PRINCIPLES (3)** An overview of the principles of operating systems. Topics include multiple processes, process synchronization and intercommunication, resource allocation, memory management, processor scheduling, and I/O device management. Not open to those who completed Programming Systems. Prerequisite: COSC 336 and COSC 338 (UG & G)
- COSC 340 STRUCTURED DOCUMENTATION TECHNIQUES (3)** Methodologies for writing effective documentation at the management, programmer, analyst and user levels. Prerequisite: COSC 336 (UG)
- COSC 341 ADVANCED CONCEPTS OF INFORMATION SYSTEMS (3)** Relationships among information systems, objectives and systems structure, covering human aspects, systems models, and applications. Prerequisites: COSC 115 and 236. (UG)
- COSC 350 DATA COMMUNICATIONS AND TELEPROCESSING (4)** Telecommunications terminology, concepts and their applications: voice & data communications, teletext, videotext, facsimile, video-conferencing, LAN's, public data networks, and telephone systems. Prerequisites: COSC 336 and 338. (UG)
- COSC 355 [527] SURVEY OF PROGRAMMING LANGUAGES (3)** Survey of the significant features of existing programming languages with emphasis on understanding the concepts abstracted from those languages. The course covers: algorithmic languages such as ALGOL, problem oriented languages such as SNOBOL, theoretically interesting languages such as LISP, and general purpose languages such as FORTRAN and PL/I. Prerequisite: COSC 336. (UG & G)
- COSC 367 [534] DISCRETE STRUCTURES (3)** This course deals with the basic mathematical structures used in computer science. It covers boolean algebra, graph theory, semigroups, grammar and automata, showing how these structures apply to heuristic programming, networks and computer construction. Prerequisites: MATH 263 and COSC 336 (UG & G)
- COSC 383 [543] DESIGN AND ANALYSIS OF ALGORITHMS (3)** Algorithm design methods such as heuristics, backtrack programming, branch and bound, recursion, simulation, divide-and-conquer, balancing and dynamic programming. Efficiency of algorithms—Np-complete problems. Prerequisite: COSC 336 and MATH 263. (UG & G)
- COSC 397 PRACTICUM IN COMPUTER SCIENCE (3)** This course is designed to give Computer Science students the opportunity to be involved in a computing facility. Each student will be assigned to a specific facility associated with a local business or industry and will be supervised by the appropriate supervisor of the computing facility and by the faculty member in charge of the course. Prerequisites: 6 hours of upper division Computer Science courses and the consent of the instructor. (UG)
- COSC 407 ANALYSIS OF INFORMATION PROCESSING SYSTEMS (3)** Analysis of existing information processing systems including systems life cycle, interactive refinement of analysis & design, information gathering & logical specifications. Credit will NOT be awarded for both COSC 407 and COSC 411. Prerequisite: COSC 341. (UG)
- COSC 409 DESIGN OF INFORMATION PROCESSING SYSTEMS (3)** Design of information processing systems (IPS) including system life cycle emphasizing design & implementative review of logical systems, design of physical systems, implementation; evaluation & maintenance. Credit will NOT be awarded for both COSC 409 and COSC 411. Prerequisite: COSC 407. (UG)
- COSC 411 [551] SYSTEMS AND DESIGN (3)** A course designed to guide the student through the stages of the evolution of data processing systems, including analyses of present information flow, system specifications, equipment selection, and implementation of the system to provide an understanding of the skill and knowledge needed for the effective use of data processing equipment in meeting information needs. Prerequisites: COSC 336 and an additional upper division Computer Science course. (UG & G)
- COSC 412 SOFTWARE ENGINEERING USING ADA (4)** Methodology of designing and programming for a wide area of applications with a high degree of modifiability, efficiency, reliability and understanding. Prerequisites: COSC 355 and 400-level COSC course. (UG)
- COSC 415 [553] IMPLEMENTATION OF PROGRAMMING LANGUAGES (3)** A study of internal organization and data structures used by compilers in lexical analysis, parsing, and code generation; run-time data structures; global properties of programming languages including scope of declarations, groupings of statements, binding times, control structures, and memory management; definitions of programming languages including the specifications of syntax and semantics, and case studies in several systems including both compiled and interpreted languages. Prerequisites: COSC 280 and COSC 355 and MATH 263. (UG & G)
- COSC 417 [554] INTRODUCTION TO THE THEORY OF COMPUTING (3)** A general introduction to the theory of computation, including finite automata, compatibility, formal languages and their relation to automata, algorithms, and algorithmic complexity. The major emphasis will be on developing formal descriptions of computers and computational processes, and practical implications of theoretical results. Prerequisites: COSC 165 or equivalent and COSC 367 or MATH 361. (UG & G)
- COSC 421 LOGIC APPLICATIONS AND PROGRAMMING (3)** Study of the logic programming language PROLOG. Application of logic to artificial intelligence, database systems and programming language. Prerequisites: COSC 355 and MATH 263. (UG)
- COSC 431 [561] SELECTED TOPICS IN COMPUTER SCIENCE (1-3)** Independent studies in selected areas of computer science. A maximum of 4 credits may be earned in selected topics. Prerequisite: Consent of instructor and nine hours of computer science. (UG & G)
- COSC 437 [563] FILE AND DATA STRUCTURES (3)** A study of the relations among elements of data involved in problems, the structure of storage media and machines, and the methods used in representing structural data. Storage systems and structures, symbol tables, searching and sorting techniques are discussed. Formal specification of data structures and generalized data management systems are investigated. Prerequisites: COSC 336 and COSC 338. (UG & G)
- COSC 441 [571] COMPUTER PERFORMANCE EVALUATION (3)** Computer system performance evaluation methodologies, techniques and tools including different types of monitors as a measurement tool, work-load characterization, important performance indices, analytic modeling with particular emphasis on the application of the operational queuing network modeling techniques to performance analysis, and technical aspects of computer selection. Prerequisites: MATH 274 and Pre or Corequisite COSC 339. (UG & G)

COSC 457 [578] DATABASE MANAGEMENT SYSTEMS (3) Data models and sublanguages. Security and integrity problems. The functions of the database administrator. The implementation and use of a database management system. A comparison of widely used DBMS packages. Prerequisite: COSC 336. (UG & G)

COSC 461 [581] ARTIFICIAL INTELLIGENCE (3) A survey of the problems and techniques involved in producing or modelling intelligence in computers. Particular emphasis will be placed on representation of knowledge and basic paradigms of problem solving. Topics include game playing, theorem proving, natural language and learning systems. Prerequisites: COSC 355 and MATH 263. (UG & G)

COSC 471 [586] COMPUTER GRAPHICS (3) An introduction to the field of computer generated and/or displayed graphics data. Covers the topics of representation, transformations, curve and 3-D problems, graphics hardware, and programming considerations. Prerequisites: MATH 263 or MATH 365 and COSC 336. (UG & G)

COSC 493 DIRECTED READINGS IN COMPUTER SCIENCE (HONORS) (3) Individual readings and background research, under the direction of a faculty member, in preparation for writing an honors thesis (restricted to students in the departmental honors program). Prerequisite: Admission to the departmental honors program. (UG)

COSC 499 HONORS THESIS IN COMPUTER SCIENCE (3-6) Writing of an honors thesis based on individual research (open only to advanced honors candidates). Prerequisite: Permission of Departmental Honors Committee. (UG)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

COSC 607 COMPUTERS IN SECONDARY EDUCATION (3)

COSC 611 COMPUTER SIMULATION (3)

COSC 613 HARDWARE AND SOFTWARE IN MICROCOMPUTERS (3)

COSC 670-679 SPECIAL TOPICS IN COMPUTER SCIENCE (3)

COSC 681 SEMINAR IN COMPUTER SCIENCE EDUCATION (3)

COSC 695 INDEPENDENT STUDY IN COMPUTER SCIENCE (3)

DANCE (DANC)

Lower Division

DANC 103 BEGINNING BALLET I (2) An introduction to the fundamentals of classical ballet with emphasis on placement and alignment of the body, turn-out, footwork, stretches, barre work, simple allegro movements and other preparatory work necessary for the establishment of a basic technical foundation. (UG)

DANC 104 BEGINNING BALLET II (2) A continued study of the technical fundamentals of classical ballet. Sequence combinations of beginning ballet movements, steps and positions of the body. Emphasis on vertical posture, centering, and coordination of port de bras with elementary allegro and adagio movements. Prerequisite: DANC 103. (UG)

DANC 107 BEGINNING MODERN DANCE I (2) An introduction to modern dance technique as derived in part from the principles of some of its American founders such as Graham, Humphrey, Weidman, and Holm. Course includes floorwork, body alignment, and studies which develop the potentials of modern dance as an expressive medium. (UG)

DANC 108 BEGINNING MODERN DANCE II (2) An expanded study in modern dance technique involving concepts of spatial awareness, dimension in form, and proficiency in locomotive and dynamic movement patterns. Prerequisite: DANC 107. (UG)

DANC 109 JAZZ DANCE I (2) American jazz dance as traced historically through movement from Afro-Caribbean and vaudeville forms to Broadway show styles from the 1920's through the 1950's. (UG)

DANC 111 TAP DANCE I (2) A beginning study of the technical fundamentals of tap dance. Includes basic one and two sound movements performed at the barre and simple rhythmic combinations in center. Also includes time steps and simple turns. (UG)

DANC 203 INTERMEDIATE BALLET I (2) Classical ballet technique that focuses on sequences of greater repetition, speed, and length. Includes elements of turning necessary for pirouettes, footwork dexterity utilized in batterie (beats), and continued awareness of form as it relates to the clear delineation of musculature lines. Prerequisite: DANC 104. (UG)

DANC 204 INTERMEDIATE BALLET II (2) A continued study of classical ballet utilizing sequence combinations that emphasize strength, suppleness, accuracy and musicality. Includes multiple turns, increased attention to epaulement, and use of the legs at 90° and 120° angles. Prerequisite: DANC 203. (UG)

DANC 207 INTERMEDIATE MODERN DANCE I (2) Modern dance technique which utilizes variations in rhythmic structure; presentation of metered, mixed-metered, and non-metered (free) rhythmic forms. Introduction to the concept of spiral movement, turns, falls and elevation. Prerequisite: DANC 108. (UG)

DANC 208 INTERMEDIATE MODERN DANCE II (2) An extension of the development of modern dance vocabulary representative of more contemporary approaches (i.e. Limon, Cunningham, Sharp, Lewitzky, etc.). Such vocabulary includes combinations of spiraling, curving, flattening of the back, and centering, shifting, rotating, flexing, and tilting in body alignment. Prerequisite: DANC 207. (UG)

DANC 211 TAP DANCE II (2) A continued study of tap dance including complex rhythms, tempi, barre and center work. New movements include wings, trenches, riffs and advanced turns. Prerequisite: DANC 111. (UG)

DANC 223 CLASSICAL BALLET: PARTNERING (3) Daily technique classes in ballet emphasizing movements used in classical pas de deux and study of phrases from the classical repertoire. Prerequisite: DANC 203. (UG)

DANC 251 TECHNIQUES OF TEACHING CREATIVE MOVEMENT (3) A student-directed approach to the teaching of creative movement to all age levels—pre-school to senior citizen. Includes learning and utilization of basic rhythmic concepts and some off-campus observations. Prerequisite: DANC 107. (UG)

Upper Division

DANC 303 ADVANCED BALLET I (2) A continued study of classical ballet with emphasis on advanced level enchainements, standard classical divertissement and style distinctions. Prerequisite: DANC 204. (UG)

DANC 304 ADVANCED BALLET II (2) Progression of technical complexities in enchainements and divertissements. Approaches to contemporary ballet stylizations based on classical forms. Prerequisite: DANC 303. (UG)

DANC 307 ADVANCED MODERN DANCE I (2) Modern dance technique focusing on quality and expression in movement. Includes effort and space harmony concepts in traveling warm-up sequences, axial adagio movement, and allegro combinations. Prerequisite: DANC 208. (UG)

DANC 308 ADVANCED MODERN DANCE II (2) Complex movement sequences which develop a high level of proficiency in feeling and form emphasizing the contemporary aspect of modern dance and the individualistic expressive potential of the student. Focus on interpretation and performance. Prerequisite: DANC 307. (UG)

DANC 309 JAZZ DANCE II (2) A continuation of Broadway show styles from the early 1960's to the present day. Includes study of contemporary jazz technique with emphasis on rock, funky, lyric and percussive movement. Prerequisites: DANC 109 and DANC 103. (UG)

DANC 310 JAZZ DANCE III (2) A continued study of contemporary jazz technique with emphasis on performance of styles used on the concert stage, television and motion pictures. Prerequisite: DANC 309. (UG)

DANC 321 HISTORY OF THE DANCE (3) An overview of dance history through the ages from its tribal beginnings to the present day. An emphasis will be placed on writing skills. Prerequisites: Jr./Sr. standing; ENGL 102 or 190 (104). Approved Group I/C—Advanced level writing course. (UG)

DANC 323 LABANOTATION (3) The Labanotation method of recording movement in written form for utilization in classroom work and reconstruction of dance and other movement activities. Prerequisite: DANC 203 or DANC 207. (UG)

DANC 331 DANCE COMPOSITION I (3) Experimentation with the basic elements of choreography as experienced through the composing of phrases, sketches, transitions, and themes and variations in the form of studies for the solo dancer. Prerequisite: DANC 207. (UG)

DANC 332 DANCE COMPOSITION II (3) An intermediate level dance composition course focusing on solos and duets with added complexities of textures, planes, rhythm, melody, and tempi. Prerequisite: DANC 331. (UG)

DANC 341 POINTE TECHNIQUE I (2) Basics of pointe (toe) work essential to the student whose interest is in total comprehension of the elements necessary to the performance of classical ballet. Includes work to strengthen the ankles and insteps, and acclimation of body weight and placement sur les pointes. Prerequisite: DANC 203. (UG)

DANC 342 POINTE TECHNIQUE II (2) Continuum of Pointe Technique I with emphasis on tempi, allegro combinations, enchainements au milieu and barre supported adage. Prerequisite: DANC 341. (UG)

DANC 370-379 SPECIAL TOPICS IN DANCE (1-3) Workshops and courses designed for study of special topics in dance not available in existing courses. Examples of such topics are: Principles and Practices of Auditioning, Dance Repertory, Seminar in Dance Education, etc. Will be offered depending on student and faculty interest and availability. Prerequisite: Consent of Department Chair. (UG)

DANC 381-382, 481, 482 DANCE COMPANY (2,2,2,2) Study and performance of advanced compositions including works by professional guest choreographers in ballet, modern dance, and jazz/ musical theatre dance styles. Rehearsals September through May. 2 credits received in spring semester reflect 2 semesters of participation. Prerequisite: Audition. (UG)

DANC 401-405 SUPERVISED STUDY: BALLET (2,2,2,2,2) A continued study of ballet technique concurrent with courses at the intermediate and advanced levels. Prerequisite: Approval from the Department Chair. (UG)

DANC 406 ADVANCED BALLET III Refinement of technique and style in complex enchainements and divertissements. Prerequisite: DANC 304. (UG)

DANC 407-410 SUPERVISED STUDY: MODERN DANCE (2,2,2,2) A continued study of modern dance technique concurrent with courses at the intermediate and advanced levels. Prerequisite: Approval from the Department Chair. (UG)

DANC 411-413 SUPERVISED STUDY: POINTE (2,2,2) Continued study of pointe technique concurrent with Pointe Technique I, II, and III. Prerequisite: Approval from the Department Chair. (UG)

DANC 414 SUPERVISED STUDY: JAZZ DANCE (2) Continued study of jazz dance technique concurrent with Jazz Dance III. Prerequisite: Approval from the Department Chair. (UG)

DANC 431 DANCE COMPOSITION III (3) An advanced level dance composition course focusing on choreographic ranges from duets to large group forms. Prerequisite: DANC 332. (UG)

DANC 433-434 DANCE PRODUCTION I & II (3,3) Choreography of full-length major works mounted for performance. Includes production elements of costume and lighting design for the work, teaching and rehearsing the work, and performance publicity. Prerequisite: DANC 431. (UG)

DANCE 441 POINTE TECHNIQUE III (2) Focus on classical ballet repertory, performing variations from significant periods. Prerequisite: DANC 342. (UG)

DANC 451-551 TEACHING DANCE IN GRADES K-12 (3) A teacher-directed approach to the exploration of methods and materials available for the teaching of multiple dance forms. Prerequisite: DANC 251 and 4 or more credits in dance technique courses, or consent of instructor. (UG & G)

DANC 495 INDEPENDENT STUDY IN DANCE (1-3) Self-directed study of an academic or creative project designed to focus on a specialized area of dance. Prerequisite: Approval of plan of study by instructor and Department Chair. (UG)

DEVELOPMENTAL MATHEMATICS (DVMT)

DVMT 100 DEVELOPMENTAL MATH I (4) A preparatory course designed to develop basic competence in arithmetic. Placement based on competency test scores. Credits do not count toward graduation (Graded S/U procedure). Prerequisite: Departmental Placement.

DVMT 101 DEVELOPMENTAL MATH II (4) A review of basic high school mathematics. Placement based on competency test scores. Credits do not count toward graduation (Graded S/U procedure). Prerequisite: Departmental Placement.

DVMT 110 INTERMEDIATE ALGEBRA (3) Real number system, solutions of equations or inequalities in one and two variables, solutions of quadratic equations, exponents, radicals, functions, polynomial algebra, progressions and complex numbers. Graded under S/U procedure. No credit toward graduation. Prerequisite: One year of high school algebra.

DEVELOPMENTAL READING (DVRD)

(See General Education Department)

DVRD 100 DEVELOPMENTAL READING I (3) This course is designed to develop basic reading skills requisite to college-level reading. These skills include vocabulary development, literal comprehension, and textbook study reading. Prerequisite: Departmental placement. Course does not carry credit toward graduation (Graded under S/U procedure).

DVRD 101 DEVELOPMENTAL READING II (3) This course reviews the basic reading skills and stresses the development of intermediate reading skills important for effective college reading. These intermediate skills include inferential comprehension, critical reading, and varied reading rates. Prerequisite: Departmental placement. Course does not carry credit toward graduation (Graded under S/U procedure).

DEVELOPMENTAL WRITING (DVWR)

DVWR 101 PREPARATION FOR COLLEGE WRITING (3) Review of grammar and usage; instruction and practice in writing effective sentences. Prerequisite to ENGL 102 for students scores indicate they need additional preparation for college-level writing. Departmental placement. Credit does not count toward graduation.

DVWR 103 ENGLISH AS A SECOND LANGUAGE: BASIC ENGLISH (5) Intensive training in listening and reading comprehension skills. Development of functional oral English. Expansion of basic vocabulary and essential idioms. Course does not carry credit toward graduation (Graded under S/U procedure). Prerequisite: Students must be non-native speakers of English. Admission by examination and permission of ESL Committee.

DVWR 104 ENGLISH AS A SECOND LANGUAGE: LOW INTERMEDIATE (5) Emphasis on fundamental grammar and writing skills. Reading and vocabulary building. Course does not carry credit toward graduation (Graded under S/U procedure). Prerequisite: Students must be nonnative speakers of English. Admission by examination and permission of ESL Committee.

DVWR 105 ENGLISH AS A SECOND LANGUAGE: INTERMEDIATE (3) Advanced grammar review with emphasis on sentence and short-paragraph construction. Prerequisite: DVWR 104 or consent of ESL Committee. Not open to those who have successfully completed DVWR 113

DVWR 106 ENGLISH AS A SECOND LANGUAGE: ADVANCED (3) Introduction to English style; emphasis on reading and writ-

ing skills, with attention to increased proficiency in conversation, as necessary. Prerequisite: DVWR 105 or permission of ESL Committee. Not open to those who have successfully completed DVWR 114.

DVWR 107 LISTENING AND SPEAKING FOR ADVANCED ESL STUDENTS (3) Intensive listening and speaking practice for high intermediate and advanced students of ESL: formal oral presentation, pronunciation and conversation practice. Prerequisite: Examination and consent of ESL Committee.

EARLY CHILDHOOD EDUCATION (ECED)

Lower Division

ECED 101 THE YOUNG CHILD AS A LEARNER (3) Introduction to the developing child and educational programs available for young children. Focuses primarily on the child himself. Classroom observation time required. (UG)

ECED 121 LABORATORY EXPERIENCES IN PROGRAMS FOR YOUNG CHILDREN (3) Practical application of educational theory through observation of and participation with young children in classroom situations. Concurrent with ECED 303. Prerequisite: ECED 101. (UG)

Upper Division

ECED 301 MATERIALS AND EXPERIENCES FOR THE YOUNG CHILD (3) Stimulating the intellectual, physical, social, and emotional development of young children through the use of varied instructional materials and activities. Prerequisite: ECED 101 or ECED 102 or approval of Early Childhood Education Department. (UG)

ECED 303 (3) CURRICULUM FOR YOUNG CHILDREN Curriculum content and methods of teaching in programs for children under six. Emphasis on the integrated curriculum of language arts, social studies, nutrition, health and safety. Prerequisites: ECED 101. Not open to students enrolling in Preprimary Curriculum. (UG)

ECED 341 PREPRIMARY CURRICULUM (4) Interdepartmental instruction by specialists in art, music, physical education and science with emphasis on the personal development of the becoming teacher and coordinated by a faculty member from Early Childhood Education program. Classroom participation. Prerequisite: Open only to Early Childhood Education Majors. PSYC 201 and PSYC 211 must have approval of Department chair. (UG)

ECED 342 PRIMARY CURRICULUM (4) Emphasis on objectives, materials, and methods of teaching the language arts and social studies in programs for young children. Participation one day weekly in an assigned classroom for young children. Prerequisite: Open only to Early Childhood Education Majors. ECED 341 or its equivalent. (UG)

ECED 343 ISSUES IN EARLY CHILDHOOD EDUCATION

(2) Parallels student teaching and is concerned with problems and interests of the student teacher and current trends and methods in teaching. Prerequisites: ECED 341 and ECED 342 or equivalent. Open only to Early Childhood Education Majors. (UG)

ECED 351, 352 STUDENT TEACHING IN EARLY CHILDHOOD (PRIMARY, PRESCHOOL) (5,5) Assignment in nursery school, kindergarten, and primary grades or other types of programs for young children under expert guidance. Two terms of approximately 8 weeks on two different age levels. Concurrent with ECED 343. (UG)

ECED 355 DIFFERENTIATED STUDENT TEACHING IN EARLY CHILDHOOD EDUCATION (1-8) Student teaching experiences in addition to those in required student teaching courses (ECED 351, ECED 352), according to needs and interests of the student. Experiences may be in public schools, or in centers for young children such as Day Care Centers, Parent-Child or Infant Centers, hospitals, or education special programs in Early Childhood Education. Prerequisite: Approval of student's advisor, Chair of Early Childhood Education, and Director Center for Applied Skills in

Education (CASE); may be repeated for a maximum of 8 credits. (UG)

ECED 360 READINESS FOR READING (2-3) Concepts of readiness for reading in Early Childhood Education with emphasis upon the physiological, sociological, cognitive and affective factors influencing readiness and skill development for teaching of young children. Prerequisites: junior standing, major in ECED. Day students must take concurrently with ECED 341. (UG)

ECED 361 TEACHING READING IN EARLY CHILDHOOD EDUCATION (3) Teaching reading in early childhood education with special emphasis on early learning related to the reading process and the teaching of beginning reading. Critical examination of content, procedures, materials in programs for nursery school through third grade. Prerequisite: 6 hours of Early Childhood or approval of Early Childhood Education Department. Day students must take concurrently with ECED 342. (UG)

ECED 403 [503] THE CURRICULUM IN PRIMARY EDUCATION (3) The child, curriculum, content, methods and materials of teaching, and program organization in the primary school years. Emphasis is on the integrated curriculum of Language Arts, Social Studies, Science, and Mathematics. Prerequisites: 6 hours of early Childhood Education. Not open to students enrolling in Primary Curriculum or Graduates of ECE programs. (UG & G)

ECED 411 [511] PARENTS AND TEACHERS: PARTNERS IN EARLY CHILDHOOD EDUCATION (3) The development of a rationale for improved parent-teacher relationships in Early Childhood Education programs. The role of paraprofessionals, specialists, and volunteers. Observation, participation, home and school visits by teachers and parents functioning as a team. Prerequisite: Six hours of Early Childhood Education. (UG & G)

ECED 415 [515] THE DAY CARE CENTER (3) An interdisciplinary course designed to prepare day care personnel. Resource persons from related agencies will participate. Topics include purposes of day care, problems of organization, administration and supervision, records, programs, community interaction, and parent relations. Field trips and observation of day care centers. Prerequisite: Six hours of Early Childhood Education. (UG & G)

ECED 417 [517] EARLY IDENTIFICATION OF LEARNING DISABILITIES (3) Survey of the nature of learning disabilities in the young child; emphasis on early identification, theoretical approaches, major disability categories; survey of remedial principles. Prerequisites: 6 hours of Psychology and 6 hours of Early Childhood Education. (UG & G)

ECED 421 [521] PROBLEMS IN EARLY CHILDHOOD EDUCATION (3) Research findings used as a basis for program planning in nursery school, kindergarten and primary grades; current trends and issues are considered. Prerequisite: student teaching and/or teaching experience in preschool or primary grades; junior standing. (UG & G)

ECED 422 WRITING TECHNIQUES FOR TEACHERS IN EARLY CHILDHOOD EDUCATION (3) Applied techniques of written communications for classroom teachers and professional educators. Focus will be upon developing the ability to write thoughtful, wellorganized letters, reports, critiques and other professional papers. Prerequisites: ENGL 102/190 (104) and 6 hours education. (UG)

ECED 423 [523] LABORATORY EXPERIENCES IN EARLY CHILDHOOD EDUCATION (3) Classroom experiences with children in preschool and primary grades in a variety of teaching-learning situations. Analysis of observations in light of current research. Concurrent with ECED 421. Summers only. Prerequisite: junior standing. (UG & G)

ECED 470-489 [570-589] SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION: (Topic to be named) (1-3) In-depth study of a selected topic in Early Childhood Education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Graduate credit only with approval of the graduate program coordinator. Each topic may be taken as a separate course; repeatable for different topics. (UG & G)

ECED 494 [594] TRAVEL AND STUDY: EARLY CHILDHOOD EDUCATION (1-6) A field study, including cultural tours in selected foreign countries, of current Early Childhood Education programs, facilities, and trends. Lectures, observations, and personal interactions. Required participation in planned educational activities and a follow-up paper. Prerequisites: junior, senior, graduate standing, or consent of the department chair. Consent of graduate program coordinator required for graduate degree credit. May be repeated for a maximum of 6 credits. (UG & G)

ECED 495 INDEPENDENT STUDY IN EDUCATION: EARLY CHILDHOOD EDUCATION (1-4) Independent study in selected areas of Early Childhood Education. Prerequisite: ECED majors only. Special permit with ECED Chair. May be repeated for a maximum of 4 credits. (UG)

ECED 496 DIRECTED READING: EARLY CHILDHOOD EDUCATION (1-4) Independent reading in selected areas of Early Childhood Education. Prerequisite: ECED majors only. Special permit with ECED Chair. May be repeated for a maximum of 4 credits. (UG)

Graduate Division

See TSU Graduate School Catalog for course descriptions.

ECED 609 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN (3)

ECED 613 PROGRAM FOR INFANTS AND YOUNG CHILDREN (3)

ECED 615 ADMINISTRATION AND SUPERVISION OF PROGRAMS FOR YOUNG CHILDREN (3)

ECED 617 ADVANCED LEARNING DISABILITIES (3)

ECED 619 MEASUREMENT AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)

ECED 621 PREVENTION OF READING FAILURE IN EARLY CHILDHOOD (3)

ECED 631 THE GIFTED AND TALENTED YOUNG CHILD (3)

ECED 637 MAINSTREAMING FOR THE CLASSROOM TEACHER (3)

ECED 647 THE TEACHING PROCESS: EARLY CHILDHOOD EDUCATION (3)

ECED 653 PERCEPTUAL AND COGNITIVE DEVELOPMENT OF YOUNG CHILDREN (3)

ECED 670-672 SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION (Topic to be named) (1-3)

ECED 695 INDEPENDENT STUDY IN EDUCATION: EARLY CHILDHOOD (3)

ECED 696 DIRECTED READINGS IN EARLY CHILDHOOD EDUCATION (3)

ECED 773 SEMINAR IN EARLY CHILDHOOD EDUCATION (3)

ECED 898 MASTER'S THESIS IN EARLY CHILDHOOD EDUCATION (3)

ECED 899 THESIS CONTINUUM (1)

ECONOMICS (ECON)

Lower Division

ECON 201 MICROECONOMIC PRINCIPLES (3) How private enterprise determines what is produced, prices, wages, profits. Supply and demand. Competition and monopoly. Labor unions, income distribution. Farm Policy. The role of the government in our economy. Not open to students who have taken 2204.101. (UG)

ECON 202 MACROECONOMIC PRINCIPLES (3) Inflation and unemployment—causes and remedies. Money and banking. Government spending and taxation. International trade. Not open to students who have taken 2204.102. Prerequisite: 2204.201. (UG)

ECON 203 HONORS MICROECONOMIC PRINCIPLES (3) How private enterprise determines what is produced, prices, wages,

profits. Supply and demand. Competition and monopoly. Labor unions, income distribution. Farm policy. The role of government in our economy. Not open to students who have taken 2204.103. (UG)

Upper Division

ECON 301 FUNDAMENTAL STATISTICS FOR ECONOMICS (3) Analysis and presentation of business and economic data; frequency distribution; measures of central tendency and variability; sampling and estimation of parameters; testing of hypotheses; simple regression analysis; measuring changes in price. Prerequisite: Mathematics MATH 111 or equivalent. (Not open to freshmen.) Not open to students who have taken Basic Statistics, MATH 231. (UG)

ECON 309 INTERMEDIATE PRICE THEORY (3) Determination of prices, output, wages, resource allocation. Theory of the firm. Theory of competition, monopolistic competition, oligopoly, and monopoly. Prerequisite: ECON 202. (UG)

ECON 310 MACROECONOMIC THEORY (3) Impact of monetary and fiscal policy. The overall level of output, prices, employment, interest rates. Prerequisite: ECON 202. (UG)

ECON 313 MONEY AND BANKING (3) Organization and function of the money, credit and banking system of the United States; banking institutions, Federal Reserve System; the relation of money and credit to prices; foreign exchange. Prerequisite: ECON 202. (UG)

ECON 321 [521] HISTORY OF ECONOMIC THOUGHT (3) Development of economic theory; eighteenth and nineteenth century classical schools. Modern Economic literature on price, investment, and employment. Prerequisite: ECON 202. (UG & G)

ECON 323 COMPARATIVE ECONOMIC SYSTEMS (3) Effects of alternative institutional arrangements on incentives and individual behavior affecting the allocation of resources. Differences between decentralized or marked planning and centralized or government planning. Prerequisite: ECON 202. (UG)

ECON 325 ECONOMIC DEVELOPMENT (3) Theory of economic growth. Problems and programs relating to least developed countries. Prerequisite: ECON 202. (UG)

ECON 331 GOVERNMENT AND ECONOMIC LIFE (3) The rationale of government control and regulation of private enterprise. Maintenance of competition. Antitrust policy. Public utility regulation. Prerequisite: ECON 202. (UG)

ECON 333 ECONOMICS OF POVERTY AND DISCRIMINATION (3) Study of the causes of poverty. How poverty and discrimination are interrelated. An analysis of existing and proposed programs to alleviate poverty and discrimination. Prerequisites: ECON 201 and ECON 202. (UG)

ECON 337 PUBLIC FINANCE AND NON-MARKET DECISION MAKING (3) Traditional principles of public finance; examination of the nature of fiscal decision making within government and the implication for resource allocation. Prerequisite: ECON 202. (UG)

ECON 339 HEALTH ECONOMICS (3) Analysis of the economic organization of the health care sector of the U.S. economy; alternative health care delivery systems and methods of financing health care services; current issues in health economics. Prerequisite: One upper level economics course or consent of instructor. (UG)

ECON 341 LABOR ECONOMICS AND LABOR RELATIONS (3) The determination of wages. Labor unions: history, structure, activities, effects. Government labor policy. Prerequisite: ECON 202. (UG)

ECON 351 URBAN ECONOMICS (3) Economic bases for the existence of metropolitan areas. The economy of the metropolitan area; its growth, income distribution, economic stability. Transportation and land use patterns. Social and other problems of metropolitan areas. Application of elementary price theory to the analysis and solution of urban issues and problems. Prerequisite: ECON 202. (UG)

- ECON 401 INTRODUCTION TO ECONOMETRICS (3)** The problem of testing economic theories against empirical data; the formulation and estimation of regression model; the use of the method of multiple regression in testing the various hypotheses of economic theories; serial correlation; the problem of identifications, application of simultaneous equation models; the use and construction of econometric models for forecasting and policymaking. Prerequisite: ECON 301 or equivalent. (UG)
- ECON 409 MANAGERIAL ECONOMICS (3)** Applications of microeconomics theory to business policies and decisions. The utilization of analytical and decisionmaking tools derived mainly from economics theory, quantitative methods, finance and marketing theory. Topics considered include pricing practices and market structures, investment decisionmaking and estimation of demand and cost of production. Prerequisites: ECON 309, and ECON 301 or MATH 231. (UG)
- ECON 410 BUSINESS CYCLES AND FORECASTING (3)** Business cycle theory; measuring economic activities; policy proposals for controlling economic fluctuations. Prerequisite: ECON 313 or ECON 310. (UG)
- ECON 419 APPLIED MICROECONOMICS (3)** Applications of principles developed in Price Theory to problems arising in various market situations. Emphasis is on analysis and solutions of specific problems. Prerequisites: ECON 309. (UG)
- ECON 421 INTERNATIONAL ECONOMICS (3)** International trade theory; balance of payments, problems, and adjustment mechanism; foreign exchange; foreign trade policy; theory of tariffs and other trade restrictions; international monetary system and organization; trade and economic growth. Prerequisite: ECON 202. (UG)
- ECON 423 CURRENT ISSUES IN MONETARY THEORY AND POLICY (3)** Empirical issues in money and banking. Different schools of thought on monetary policies and their implications. Prerequisite: ECON 313. (UG)
- ECON 451 INTRODUCTION TO MATHEMATICAL ECONOMICS (3)** Intended primarily for students planning a graduate education in Economics. A study of the fundamental mathematical methods widely used in Economics: calculus and linear algebra. Emphasis is on optimization theory; economic examples are used throughout. Prerequisites: ECON 309, ECON 310, or permission of instructor and MATH 211 or MATH 274. (UG)
- ECON 470.479 TOPICS IN ECONOMICS (3)** This course will study the economic development process in a particular area of the world. The region chosen will depend upon mutual faculty and student interest. There will be an analysis of the different factors that have promoted and hindered economic growth. Various policy options will be explored. Prerequisites: ECON 202, junior standing and two advanced economic courses. (UG)
- ECON 485 [585] SEMINAR ON ECONOMIC ISSUES (3)** Research and writing of papers on an economic issue selected by the instructor. Prerequisites: ECON 309, ECON 313, and ECON 310. (UG & G)
- ECON 493 [593] WORKSHOP ON ECONOMIC EDUCATION (3)** Designed to help teachers and school administrators gain a better understanding of the economic working of the society in which we live. Prerequisite: Consent of the instructor. (UG & G)
- ECON 495 [595] INDEPENDENT STUDY (1-3)** Individual and supervised study in selected areas of economics. Admission by permission of instructor. (UG & G)
- ECON 497 [597] PRACTICUM IN ECONOMICS (3)** Supervised work experience designed to promote an understanding of the economic system and the practical application of economic principles. Prerequisites: Economics Major, junior standing, 3.00 GPA and consent of Practicum Coordinator. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

- ECON 690 INDEPENDENT STUDY (1-3)**
- ECON 693 ECONOMIC EDUCATION RESEARCH & METHODS (3)**

- ECON 695 SEMINAR IN ECONOMICS (3)**
- ECON 697 INTERNSHIP IN ECONOMICS (3)**

ELEMENTARY EDUCATION (ELED)

Upper Division

- ELED 311 CHILD AND THE ELEMENTARY SCHOOL CURRICULUM (3)** The child, the school and community, and the curriculum of the modern elementary school are interpreted in terms of the roles and functions of the public school in a democratic society. Prerequisites: PSYC 101, PSYC 201, ELED 363. (UG)
- ELED 321 TEACHING LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3)** Language needs and abilities of children. Development of effective language skills with emphasis on reading. Evenings and summers only; part of Curriculum II in day program. Prerequisites: PSYC 101, PSYC 201. (UG)
- ELED 323 TEACHING READING IN THE ELEMENTARY SCHOOL (3)** Introduction to reading in the elementary school. A survey of varied approaches with emphasis on skills development. Prerequisites: PSYC 101, PSYC 201, ELED 363. (UG)
- ELED 363 FIELD STUDIES FOR ELEMENTARY TEACHING (3)** Initial experiences in teaching and learning activities in specified settings will be provided. Students will study school activities which are directly related to classroom instruction as well as community related activities. Prerequisite: One course in education or PSYC 201 or consent of instructor. (UG)
- ELED 365 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3)** Locating, organizing, synthesizing, and interpreting fundamental social information. Evenings and summer only; part of Curriculum II in the day program. (UG)

Student Teaching

The following student teaching courses involve ten to twelve weeks, full-time, in public school classrooms under the guidance of master teachers. Conferences with the university supervisor. Prerequisite: Approval of Elementary Education Department and the Director of the Center for Applied Skills in Education.

- ELED 379 STUDENT TEACHING IN ELEMENTARY SCHOOL (10) (UG)**
- ELED 380 STUDENT TEACHING IN ELEMENTARY SCHOOL—ART (6) (UG)**
- ELED 382 STUDENT TEACHING IN ELEMENTARY SCHOOL—DANCE (6) (UG)**
- ELED 391 STUDENT TEACHING IN ELEMENTARY SCHOOL—MUSIC (6) (UG)**
- ELED 392 STUDENT TEACHING IN ELEMENTARY SCHOOL—PHYSICAL EDUCATION (6-7) (UG)**
- ELED 399 DIFFERENTIATED STUDENT TEACHING—ELEMENTARY (1-8)** Student teaching experience in addition to those in ELEM 379 or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the Director of the Center for Applied Skills in Education. Not open to those who have completed ELED 498. May be repeated for a maximum of 8 credits. (UG)
- ELED 411 [511] STAFF DEVELOPMENT AND LEADERSHIP IN THE ELEMENTARY SCHOOL (3)** An introductory course in elementary school staff development and administration with emphasis upon interpersonal and staff relationships, learning strategies and settings, curriculum developments and school-community concerns. A course designed for classroom teachers; curriculum writers; and specialists; senior, helping or resource teachers; teacher advisors; team leaders; grade or department chairpersons; and others in leadership roles. Prerequisites: A teaching certificate and/or teaching experience. (UG & G)
- ELED 429 [529] METHODS AND PRINCIPLES OF READING INSTRUCTION—ADVANCED (3)** Principles involved in building a developmental reading program; prevention of reading diffi-

culties; methods of remedial reading. Prerequisite: ELED 323 or ELED 462. (UG & G)

ELED 431 TEACHING POPULATION STUDIES (3) Teaching strategies in the examination of the dynamics of population change, focusing on the trends and attitudes affecting mankind's future. Prerequisite: HLTH 101, SOCI 101, GEOG 109 or consent of instructor. (UG)

ELED 441 [541] CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (3) The child and his curriculum. The teacher's role in curriculum as a process. Principles and philosophies of curriculum development. Objectives, practices, materials, and evaluation trends. Prerequisite: ELED 379. (UG & G)

ELED 457 [557] ENGLISH FOR THE NON-ENGLISH SPEAKING CHILD (3) Methods of teaching English to elementary school children whose native tongue is another language. Prerequisites: Elementary language arts methods course or elementary teaching experiences or consent of instructor. (UG & G)

ELED 458 [558] PRACTICUM: ENGLISH FOR THE NONENGLISH SPEAKING CHILD (1-4) Supervised practical experience in teaching English to elementary school children whose native tongue is another language. Prerequisite: ELED 457 and student teaching or teaching experience. May be repeated for a maximum of 4 credits. (UG & G)

ELED 462 ELEMENTARY CURRICULUM II (6) Integration of language arts (spelling, writing, literature, listening, usage, vocabulary development), social studies (nature of groups, research units, history, economics, government, sociology), and advanced reading instruction. To be taken during student teaching semester. Prerequisites: ELED 311 and approval of Education Department. (UG)

ELED 494 [594] TRAVEL AND STUDY: ELEMENTARY EDUCATION (1-6) Study abroad of educational facilities, programs, or practices, or selected projects in Elementary Education topics. By special arrangement with program chairperson and sponsoring instructors. Consent of graduate program coordinator required for graduate degree credit. May be repeated for a maximum of 6 credits. (UG & G)

ELED 495 [595] INDEPENDENT STUDY IN EDUCATION: ELEMENTARY (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Approval of appropriate program chair. May be repeated for a maximum of 4 credits. (UG & G)

ELED 496 [596] DIRECTED READING: ELEMENTARY EDUCATION (1-4) Independent reading in selected areas of Elementary Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students. Prerequisite: Approval of appropriate program chair. May be repeated for a maximum of 4 credits. (UG & G)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

ELED 611 READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL—ADVANCED (3)

ELED 613 PSYCHOLINGUISTICS AND READING COMPREHENSION (3)

ELED 621 DIAGNOSIS AND PRESCRIPTION FOR LEARNING DIFFICULTIES (3)

ELED 623 DIAGNOSIS AND PRESCRIPTION FOR LEARNING DIFFICULTIES—ADVANCED (3)

ELED 631 EDUCATING THE GIFTED (3)

ELED 633 READING AND LANGUAGE ARTS FOR GIFTED STUDENTS (3)

ELED 637 MAINSTREAMING FOR THE CLASSROOM TEACHER (3)

ELED 640 DISCIPLINE AND CLASSROOM MANAGEMENT IN THE ELEMENTARY SCHOOL (3)

ELED 643 VALUES REALIZATION: STRATEGIES FOR TEACHERS, PARENTS, AND COUNSELORS (3)

ELED 647 THE TEACHING PROCESS: ELEMENTARY EDUCATION (3)

ELED 648 INDIVIDUALIZING LEARNING IN THE ELEMENTARY SCHOOL (3)

ELED 661 HUMANIZING THE CURRICULUM (3)

ELED 665 THEORY AND PRACTICE OF CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (3)

ELED 670-674 SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3)

ELED 685 SEMINAR IN ELEMENTARY SCHOOL SOCIAL STUDIES (3)

ELED 695 INDEPENDENT STUDY IN EDUCATION: ELEMENTARY (1-4)

ELED 701 DEVELOPING CRITICAL, CREATIVE, AND PROBLEM SOLVING THINKING STRATEGIES (3)

ELED 716 THE ADMINISTRATION OF THE ELEMENTARY SCHOOL (3)

ELED 770-774 SPECIAL TOPICS IN ELEMENTARY EDUCATION: (Topic to be named) (1-3)

ELED 775 SEMINAR IN ELEMENTARY EDUCATION (3)

ELED 781 SEMINAR IN ELEMENTARY SUPERVISION (3)

ELED 797 INTERNSHIP IN ELEMENTARY EDUCATION (1-6)

ELED 898 MASTER'S THESIS IN ELEMENTARY EDUCATION (3)

ELED 899 THESIS CONTINUUM (1)

ENGLISH (ENGL)

English Course Level And Numbering

Lower-division English courses (100-200 level) are designed as introductions to the subject. Upper-division English courses (300-400 level) are more particularly focused and assume the student has the background specified by the course prerequisites. There is no difference in degree of difficulty or specialization between 300 level and 400 level courses; students should not assume, therefore, that a 400 level course is more advanced than one at the 300 level.

Beginning Fall 83, the English Department employed the following system for numbering courses:

DVWR 100 series,—Developmental Courses

ENGL 10 series,—Writing Courses

ENGL 20 series,—British Literature Courses

ENGL 30 series,—American Literature Courses

ENGL 40 series,—World Literature Courses

ENGL 50 series,—Grammar and Linguistics Courses

ENGL 60 series,—Analysis, Criticism, and Research Courses

ENGL 70 series,—Themes and Topics Courses

ENGL 80 series,—Seminars

ENGL 90 series,—Honors, Intensive, and Experimental Courses

This new numbering system for English courses is applied throughout this *Catalog*. If a course formerly had a different number, that number is given in parentheses following the course description. If prior to 1983, a student earned credit in an English course bearing the parenthetical number, he or she may not earn credit for it under its new number. A student may not twice earn credit for the same course even though it is differently numbered. Variable topic courses which may be repeated for credit are identified in the course listings.

Lower Division

ENGL 102 COLLEGE WRITING (3) Review of grammar, study of paragraphs, and reading and writing of essays, with emphasis on patterns of organization. (UG)

ENGL 190 HONORS COLLEGE WRITING (3) Principles of expository writing based on selected readings. Open only to freshmen selected by the English Department on the basis of superior high school records and aptitude test scores; for them this course replaces 1501.102. Honors College. Special permit only. (UG) Not open to students who have successfully completed ENGL 104.

ENGL 221 BRITISH LITERATURE TO 1798 (3) Survey of poetry, prose, and drama from the Middle Ages through the eighteenth century; emphasis on works by Chaucer, Shakespeare, Milton, Pope, and Swift. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 204.

ENGL 222 BRITISH LITERATURE SINCE 1798 (3) Survey of poetry and prose of the nineteenth and early twentieth centuries, such as works by Wordsworth, Keats, Dickens, Browning, Lawrence, and Woolf. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 205.

ENGL 231 AMERICAN LITERATURE TO 1865 (3) Major writers and literary movements from the Colonial Period to the Civil War, such as works by Taylor, Emerson, Poe, Hawthorne, Melville, and Whitman. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 211.

ENGL 232 AMERICAN LITERATURE SINCE 1865 (3) Major writers and literary movements since the Civil War, such as Dickinson, Twain, James, Frost, Hemingway, Fitzgerald, and Faulkner. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 212.

ENGL 233 SURVEY OF AFRO-AMERICAN LITERATURE (3) Slave narratives, post-Civil War and twentieth-century developments and such writers as Wheatley, Douglass, Hughes, and King. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 251.

ENGL 234 MAJOR WRITERS IN AFRO-AMERICAN LITERATURE (3) Literature of slavery, the Reconstruction, the Harlem Renaissance, the Depression and after, with emphasis on Chesnutt, Hughes, Wright, and Walker. Prerequisite: ENGL 102. ENGL 233 is recommended but not required as a prerequisite to ENGL 234. (UG) Not open to students who have successfully completed ENGL 252.

ENGL 235 ETHNIC-AMERICAN LITERATURE (3) Comparative survey of Asian, European, Black, Jewish, and other immigrant American literature, with emphasis on literary, historical, and sociological approaches. Prerequisites: ENGL 102. (UG) Not open to students who have completed ENGL 261.

ENGL 241 WORLD LITERATURE THROUGH THE MIDDLE AGES (3) Writings from Biblical and classical antiquity to the Renaissance. Variable content. Prerequisite: ENGL 102. (UG) Not open to students who have completed ENGL 201.)

ENGL 242 WORLD LITERATURE FROM THE RENAISSANCE (3) Writings from the Renaissance to the present era. Variable content. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 202.

ENGL 243 INTRODUCTION TO CLASSICAL MYTHOLOGY (3) The study of myth in selected works from Greek and Roman literature. Prerequisites: ENGL 102. (UG) Not open to students who have successfully completed ENGL 226.

ENGL 244 INTRODUCTION TO FOLKLORE (3) Aspects of folklore relevant to literature. Emphasis on the various forms and materials of folk narrative (fairy tale, legend, etc.). Focus on English, Irish, and American tales; other countries considered. Ethnic folklore, proverbs, superstitions, and folklore archaeology included according to student interest. Prerequisites: ENGL 102. (UG) Not open to students who have successfully completed ENGL 210.

ENGL 245 THE CONTINENTAL SHORT STORY (3) Study of the development of the short story in 19th and 20th century Europe. Readings include such major continental writers as Flaubert, Tolstoy, Kafka, Sartre, and Camus. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 235.

ENGL 246 THE CONTINENTAL SHORT NOVEL (3) Study of the development of the short novel ("novella") in 19th and 20th cen-

tury Europe. Readings include major continental authors such as Dostoevsky, Mann, Kafka, Gide, Hesse, and Solzhenitsyn. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 237.

ENGL 251 APPLIED GRAMMAR (3) Grammar, syntax, and usage for improvement of writing style. No credit toward major requirements. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 200.

ENGL 261 ELEMENTS OF POETRY (3) Formal analysis of poems, with emphasis on imagery, diction, sound patterns, stanzaic form, and the major modes and genres. Prerequisites: ENGL 102. (UG) Not open to students who have successfully completed ENGL 233.

ENGL 263 ELEMENTS OF FICTION (3) Formal analysis of fiction, especially the short story, with emphasis on point of view, plot, character, setting, design, and theme. Prerequisites: ENGL 102. (UG) Not open to students who have successfully completed ENGL 224.

ENGL 265 ELEMENTS OF DRAMA (3) Formal analysis of the kinds of drama, such as tragedy and comedy, and the structure of drama, including plot, character, theme, language, and setting. Prerequisites: ENGL 102. (UG) Not open to students who have successfully completed ENGL 243.

ENGL 270 IDEAS IN LITERATURE (3) Thematic approach to works of American, British, and World literature. Variation in content. May be re-elected once. Prerequisite: ENGL 102. (UG) Not open to students who have successfully completed ENGL 213.

ENGL 271 THEMES IN AMERICAN LITERATURE (3) Emphasis on a theme such as Rebels and Victims, Americans Abroad, American Dream and Nightmare. Variation in content. May be reelected once. Prerequisite: ENGL 102. (UG)

ENGL 283 INTRODUCTION TO IMAGINATIVE WRITING (3) Theories and technical considerations pertinent to writing poetry and fiction, with discussion of student writing. Consent of instructor. Offered by Department on a S/U basis. (UG)

ENGL 290 HONORS: SPECIAL STUDIES IN LITERATURE (3) Small group discussion and analysis of selected works not generally available in other electives, with some research experience. Variation in content. May not be re-elected. Open to students with high achievement in college English. Prerequisites: 1501.190 or one 200-level English course; consent of Department. Honors College. Special permit only. (UG) (ENGL 273.)

Upper Division

ENGL 311 WRITING POETRY (3) Nature of the creative process and art of imaginative expression in writing poetry. Prerequisite: Consent of instructor. S/U grading. (UG) Not open to students who have successfully completed ENGL 383.

ENGL 312 WRITING FICTION (3) Nature of the creative process and art of imaginative expression in writing fiction. Prerequisite: Consent of instructor. S/U grading. (UG) Not open to students who have successfully completed ENGL 385.

ENGL 313 ADVANCED COMPOSITION (3) Expository writing with emphasis on organization, evidence, correct usage, and effective style. Prerequisite: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 331.

ENGL 315 CREATIVITY AND STYLE IN WRITING NONFICTION (3) Originality and personal style in expository writing. Emphasis on concreteness, tone, imagery, connotation, effective sentences, and logic. Prerequisite: 2 ENGL Courses and consent of instructor. (UG) Not open to students who have successfully completed ENGL 380.

ENGL 317 WRITING FOR BUSINESS AND INDUSTRY (3) Standard written formats used in business and industry, including correspondence, memoranda, and reports. Projects individualized to meet student needs and career interests. Prerequisite: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 333.

ENGL 318 ADVANCED INFORMATIONAL WRITING (3) Techniques for gathering and presenting information through the re-

port. Projects individualized to meet needs of students in various disciplines. Prerequisite: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 334.

ENGL 321 [511] MEDIEVAL BRITISH LITERATURE (3) Emphasis on the mystical writers, *Piers Plowman*, the *Gawain*-poet, and Arthurian literature. Prerequisite: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 340.

ENGL 322 [512] BRITISH MEDIEVAL AND RENAISSANCE DRAMA (3) Development of the drama, excluding Shakespeare, with emphasis on plays by Marlowe, Kyd, Jonson, Ford, and Webster. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 319.

ENGL 323 [513] BRITISH RENAISSANCE LITERATURE (3) Cultural and political backgrounds with emphasis on Skelton, Wyatt, Surrey, Spenser, Sidney, Raleigh, and Lodge. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 302.

ENGL 324 [514] BRITISH LITERATURE OF THE LATER RENAISSANCE (3) Major intellectual and literary currents of 1600-1660 in the poetry of Donne, Herbert, Marvell, Jonson, and Milton, and the prose of Bacon, Browne, Burton, and Hobbes. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 303.

ENGL 325 [515] EIGHTEENTH-CENTURY BRITISH LITERATURE (3) Social and intellectual backgrounds, literary trends, and significant authors, such as Swift, Pope, Fielding, Johnson, and Boswell, with emphasis on satire. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 345.

ENGL 326 [516] LITERATURE OF THE BRITISH ROMANTIC PERIOD (3) Major writers such as Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats from 1790 to 1830 with emphasis on the philosophic and social backgrounds. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 335.

ENGL 327 THE VICTORIAN AGE (3) Main currents of British literature and society, 1830-1901, with emphasis on Tennyson, Browning, Arnold, Carlyle, Ruskin, Dickens, and Eliot. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 337.

ENGL 331 [517] AMERICAN DRAMA (3) American drama from the Colonial Period to the present, with emphasis on twentieth-century plays by O'Neill, Williams, Miller, Bullins, and Wilder. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 309.

ENGL 341 [518] HISTORY AND LITERATURE OF THE OLD TESTAMENT (3) The chief books of the Old Testament and the Apocrypha studied from a literary and historical point of view. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 328.

ENGL 342 [519] FOLKLORE AND LITERATURE (3) How and why literary artists draw plots, characters, themes, and style from ancient folk tradition: the anonymous oral narratives, songs, jests, and proverbs that circulate in all cultures. Focus on universal folkloric material in such works as the Bible, Aesop's *Fables*, the *Arabian Nights*, *Peer Gynt*, and *Harvest Home*. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 347.

ENGL 343 [543] MYTH AND LITERATURE (3) Literary reinterpretations of themes and figures from Greek and Roman mythology. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 326.

ENGL 344 [544] THE CONTINENTAL NOVEL (3) A study of major continental novels in translation. Emphasis will be upon related and comparative elements in the novels of writers of France, Germany, Italy, and other European countries. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 323.

ENGL 345 PERSPECTIVES IN WORLD DRAMA (3) A study of drama, the perspective to vary. Approaches may include Greek

drama and its adaptation to the European stage; Oriental, Indian, African theatre; comparative drama: the genre as developed in various cultures. May be repeated. Prerequisites: 2 ENGL courses. (UG)

ENGL 346 [546] MODERN DRAMA (3) British, American, and European plays, with attention to playwrights such as Ibsen, Strindberg, Chekov, Shaw, Pirandello, Brecht, Sartre, and Beckett. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 321.

ENGL 347 WORLD LITERATURE WRITTEN IN ENGLISH (3) Literature originally published in English from Africa (including South Africa), India, Australia, New Zealand, Canada, and the West Indies. Mainly twentieth-century fiction, poetry, and drama. Prerequisites: 2 ENGL courses. (UG)

ENGL 350 [550] COMPARATIVE GRAMMAR (3) Study of English grammar: traditional, structural, transformational. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 332.

ENGL 351 [501] HISTORICAL LINGUISTICS (3) An introduction to language typology and Indo-European philology; historical development of linguistics up to the twentieth century. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 325.

ENGL 352 [502] STRUCTURAL LINGUISTICS (3) A study of the developments in linguistic theory in the twentieth century; major figures, De Saussure, Sapir, Bloomfield, Trubetzkoy, Chomsky. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 327.

ENGL 353 [503] HISTORY OF AMERICAN ENGLISH (3) Origins and history of American dialects; development of elements of vocabulary, sounds, and grammar which distinguish American English; standards of American English. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 329.

ENGL 361 LITERARY RESEARCH AND APPLIED CRITICISM (3) Bibliography and research methods and critical approaches to literature, with emphasis on the formalistic, social, psychological, and archetypal. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 351.

ENGL 363 FILM AND LITERATURE (3) Comparative examination of the complex relationships between film and literature. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 361.

ENGL 370 SPECIAL TOPICS: LITERATURE OF WOMEN (3) Selected works by and/or about women, with emphasis on themes, issues, or genres. Variation in content. May be re-elected. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 357.

ENGL 371 WOMEN POETS: THEMES AND IMAGES (3) Development of a distinctive body of poetry by British and American women including Browning, Dickinson, Plath, and Rich. Emphasis on twentieth-century American poets and historical background. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 353.

ENGL 372 WOMEN WRITERS (3) Development of women's literary traditions in the work of nineteenth- and twentieth-century British and American women, including Austen, Cather, Woolf, and Lessing. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 355.

ENGL 373-79 THEMES IN LITERATURE (3) Thematic approach to selected works of American, British, and World literature. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 370.

ENGL 417 TOPICS IN WRITING (3) Specialized topics for writers of non-fiction, fiction and poetry. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG) Not open to students who have successfully completed ENGL 470.

ENGL 420 [520] DEVELOPMENT OF THE BRITISH NOVEL: EIGHTEENTH CENTURY (3) Georgian fiction and its social back-

- ground, especially works by Defoe, Richardson, Fielding, Smollett, Sterne, and Austen. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 422.
- ENGL 421 [521] DEVELOPMENT OF THE BRITISH NOVEL: NINETEENTH CENTURY (3)** Mainly Victorian fiction and its social background, especially works by Scott, the Brontës, Thackeray, Dickens, Eliot, and Hardy. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 423.
- ENGL 422 [522] DEVELOPMENT OF THE BRITISH NOVEL: TWENTIETH CENTURY (3)** Modern fiction and its social background, especially works by Joyce, Lawrence, Woolf, Forster, Waugh, and Greene. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 419.
- ENGL 423 [523] MODERN BRITISH POETRY (3)** Emphasis on Hopkins, Hardy, Yeats, Auden, Spender, Sitwell, Thomas, and Larkin. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 420.
- ENGL 425 [525] CHAUCER (3)** Major poems, especially *The Canterbury Tales* and *Troilus and Criseyde*. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 410.
- ENGL 427 [527] SHAKESPEAREAN COMEDY (3)** Shakespeare's development as a poet and dramatist in the comedies and romances. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 415.
- ENGL 428 [528] SHAKESPEAREAN TRAGEDY (3)** Shakespeare's development as a poet and dramatist in the histories and tragedies. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 416.
- ENGL 429 [529] MILTON AND THE HUMANIST TRADITION (3)** Major poetry and prose with emphasis on Milton's place in the humanist tradition. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 429.
- ENGL 431 [531] LITERATURE OF THE AMERICAN ROMANTIC PERIOD (3)** Social and political backgrounds, 1819-1860, important literary ideas, criticism, and major authors, such as Irving, Cooper, Emerson, Thoreau, Hawthorne, Melville, and Poe. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 427.
- ENGL 432 [532] LITERATURE OF THE AMERICAN REALISTIC PERIOD (3)** Major writers, such as Dickinson, Twain, Crane, and James; important secondary writers; social and political backgrounds; important literary ideas and criticism, 1860-1914. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 428.
- ENGL 433 [533] AMERICAN SHORT STORY (3)** Authors and schools, such as Irving, Hawthorne, Poe, Hemingway, Welty, Wright, Porter, local color writers, realists, and naturalists. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 435.
- ENGL 435 [535] DEVELOPMENT OF THE AMERICAN NOVEL: NINETEENTH CENTURY (3)** Major novelists, such as Cooper, Melville, Hawthorne, Twain, Howells, James, and Crane. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 445.
- ENGL 436 [536] DEVELOPMENT OF THE AMERICAN NOVEL: TWENTIETH CENTURY (3)** Major novelists, such as Wharton, Fitzgerald, Faulkner, and Ellison. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 446.
- ENGL 437 [537] AMERICAN POETRY THROUGH FROST (3)** Puritan beginnings through the early twentieth century, with emphasis on Emerson, Poe, Whitman, Dickinson, and Frost. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 447.
- ENGL 438 [538] MODERN AMERICAN POETRY (3)** Poetic movements from the 1920's to present, and major poets, such as Eliot, Stevens, Williams, Lowell, Plath, and Rich. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 448.)
- ENGL 441 [541] MODERN FICTION TO WORLD WAR II (3)** Work of the modern masters of fiction, with emphasis on Proust, Mann, and Joyce. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 408.
- ENGL 442 [542] MODERN FICTION SINCE WORLD WAR II (3)** Works of the significant writers—English, American, and Continental—of the past thirty years, including such figures as Grass, Robbe-Grillet, Solzhenitsyn, and Burgess. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 409.
- ENGL 451 [551] HISTORY OF THE ENGLISH LANGUAGE (3)** Changes and reasons for the changes in grammar, sound, and vocabulary of the language from Old English to modern times. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 430.
- ENGL 452 [552] STRUCTURE OF THE ENGLISH LANGUAGE (3)** A linguistic approach to sounds, forms, syntax, and usage. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 431.
- ENGL 461 [561] HISTORY OF LITERARY CRITICISM (3)** Major statements in literary theory from Aristotle to the present, including Horace, Sidney, Johnson, Coleridge, Eliot, and Frye. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 405.
- ENGL 465 [565] BRITISH AND AMERICAN PROSE (3)** Nonfictional prose, with emphasis on form and style. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 437.
- ENGL 471 [571] TOPICS IN WORLD LITERATURE (3)** Authors, periods, genres, or conventions. Variation in content from year to year; may be re-elected once. Prerequisites: 2 ENGL courses. (UG & G)
- ENGL 472 [572] TOPICS IN BRITISH LITERATURE (3)** Authors, periods, genres, or conventions. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG & G)
- ENGL 473 [573] TOPICS IN AMERICAN LITERATURE (3)** Authors, periods, genres, or conventions. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG & G)
- ENGL 475 [575] TOPICS IN LINGUISTICS (3)** Topics and issues in contemporary linguistics theory, with particular attention to recent interdisciplinary subspecialty developments: psycholinguistics, sociolinguistics, pedagogic linguistics, etc. Topics to vary. Prerequisite: One linguistics course or consent of the instructor. May be re-elected once. (UG & G) Not open to students who have successfully completed ENGL 476.
- ENGL 476 [576] TOPICS IN MULTI-ETHNIC AMERICAN LITERATURE (3)** Possible topics include women in ethnic literature, Jewish writers, the Catholic novel. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG & G) Not open to students who have successfully completed ENGL 475.
- ENGL 477 TOPICS IN BLACK AMERICAN LITERATURE (3)** Authors, periods, genres, or conventions. Variation in content. May be re-elected once. Prerequisites: 2 ENGL courses. (UG)
- ENGL 485-86 [585-586] SEMINAR IN LITERARY STUDIES (3)** Intensive study of one area of British, American, or World literature, e.g., a specific author, period, school, or genre. Variation in content. May be re-elected. Prerequisite: Junior standing. (UG & G)
- ENGL 490 [590] DIRECTED STUDIES IN ENGLISH (3)** Independent reading of a specific author, period, topic, problem, or school of literature. Topic selected by student in consultation with professor. May be re-elected once. Prerequisites: 18 hours in English, or 12 hours in English and 6 in a related discipline; minimum 3.00 average in English and the related discipline; consent of Department chair and instructor. (UG & G) Not open to students who have successfully completed ENGL 491.

ENGL 494 [594] TRAVEL AND STUDY (3-6) Places and topics to be selected by student in consultation with instructor. Prerequisites: 2 ENGL courses. (UG & G)

ENGL 497 ENGLISH PRACTICUM (3) Professional experience in such areas as editing, research, and tutoring directed by a member of the faculty or staff of the University. 150I.497 and 498 may be re-elected or taken in combination for a maximum of six credits. No credit toward English major or minor. Prerequisite: Consent of English Internship/Practicum Coordinator. S/U grading. (UG)

ENGL 498 ENGLISH INTERNSHIP (3) On-the-job experience in research, editing, and writing in government, public relations, journalism, industry, and other professional positions. 150I.497 and 498 may be re-elected or taken in combination for a maximum of six credits. No credit toward English major. Prerequisite: Consent of English Internship/Practicum Coordinator. S/U grading. (UG)

ENGL 499 HONORS THESIS (4) Intensive treatment of a topic in such areas as literary criticism, creative writing, and expository writing chosen by the student in consultation with the thesis advisor. Restricted to candidates for Honors in English. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

ENGL 621 STUDIES IN ENGLISH LITERATURE (3)

ENGL 623 STUDIES IN LITERARY CRITICISM (3)

ENGL 625 STUDIES IN AMERICAN LITERATURE (3)

ENGL 627 STUDIES IN WORLD LITERATURE (3)

ENGL 631 STUDIES IN LINGUISTICS (3)

FINANCE (FIN)

Upper Division

FIN 331 PRINCIPLES OF FINANCIAL MANAGEMENT (3) Financial analysis and decision techniques for non-profit, business and governmental organizations. Financial markets, security valuation, analysis of financial condition, forecasting, working capital management, capital budgeting, cost of capital, leverage, optimal capital structure, dividend policy. Prerequisite: Junior/major standing, MATH 231 or ECON 301, ACCT 201 and ACCT 202 or ACCT 205 and ACCT 206, ECON 201 or ECON 203, ECON 202. Special permit. (UG)

FIN 332 ADVANCED FINANCIAL MANAGEMENT (3) In-depth financial theory and analysis in selected areas. CAPM, cost of capital, optimal capital structure, dividend policy, capital budgeting, mergers and acquisitions, working capital management. Prerequisites: FIN 331 and COSC 115. (UG)

FIN 333 INVESTMENTS AND SECURITY ANALYSIS (3) Theory and practice in valuation of government and corporate securities. Institutional factors, security analysis in the context of the economy and industry, principles of portfolio management. Prerequisites: FIN 331, COSC 115, MATH 211 or MATH 213. (UG)

FIN 430 MANAGEMENT OF FINANCIAL INSTITUTIONS (3) Operation, management and analysis of financial institutions. Capital formation, roles, asset and liability management, risk and profitability management. Prerequisites: FIN 331. (UG)

FIN 433 PORTFOLIO MANAGEMENT (3) Theory and practice in investment portfolio assembly and revision. Mathematical modeling, measurement of performance, options and futures hedging. Prerequisites: FIN 333. (UG)

FIN 435 INTERNATIONAL FINANCE (3) Framework of international finance including balance of payments, foreign exchange, foreign money and capital markets, and financial management of the multinational corporation. Prerequisites: FIN 331. (UG)

FIN 439 FINANCIAL POLICY (3) Case approach to qualitative and quantitative issues in finance. Analysis of financial condition, forecasting, asset and liabilities management, leasing, hedging, business combinations, reorganization and bankruptcy. Prerequisites: FIN 332, FIN 333, FIN 435, senior status. (UG)

FIN 470 TOPICS IN FINANCE (3) In-depth study of contemporary issues in finance. Course content varies with each topic. Prerequisites: FIN 332. (UG)

FIN 491 SEMINAR IN FINANCE (3) Reading, analysis and criticism of selected literature in finance. Course content varies. Prerequisites: FIN 332. (UG)

FIN 495 INDEPENDENT RESEARCH IN FINANCE (1-3) Directed in-depth academic research in finance in a specific area of joint faculty member/student interest. May be re-elected for a maximum of 6 credits. Prerequisites: FIN 332. Minimum 2.50 cumulative GPA. Consent of instructor and Chair. Special permit. (UG)

FIN 497 PRACTICUM IN FINANCE (3) Students are required to work in assigned projects in business environments. Graded under S/U procedure. May be re-elected for a maximum of 6 credits. Prerequisites: FIN 331, declared SBE major with Finance Concentration. Minimum of 2.50 Cumulative GPA. Consent of instructor and Chair. Special permit. [Co-op fee required] (UG)

FRENCH (FREN)

Lower Division

FREN 101-102 FRENCH ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation; introduction to French culture. (UG)

FREN 201-202 FRENCH INTERMEDIATE I, II (4, 4) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Conducted in French. Prerequisite: FREN 101-102 or equivalent. (UG)

Upper Division

FREN 301-302 FRENCH COMPOSITION AND CONVERSATION I, II (3,3) Intensive exercises in French composition and conversation beyond the intermediate level. Conducted in French. Prerequisite: FREN 201-202 or equivalent. (UG)

FREN 303 FRENCH STYLISTICS (3) Development of writing skills with stress on language structure and important aspects of style. Conducted in French. Prerequisite: FREN 301-302 or equivalent. (UG)

FREN 305 CONVERSATION IN FRENCH (3) Open to non-native speakers of French who have a basic knowledge of French but need to develop oral fluency. Prerequisite: At least three years of high school French, or two years of college French, or equivalent, or consent of instructor. (UG)

FREN 311-312 FRENCH CULTURE AND CIVILIZATION I, II (3,3) French civilization from its origins: history, geography, institutions and the arts. Contemporary France, its geography, recent history, social, economic, political and judicial institutions. Conducted in French. Prerequisite: FREN 301-302 or equivalent. (UG)

FREN 321-322 SURVEY OF FRENCH LITERATURE I, II (3,3) French literature from Chanson de Roland to the present. Conducted in French. Prerequisite: FREN 201-202 or equivalent. (UG)

FREN 331 FRENCH FOR BUSINESS (3) Introduction to French business and economy, with practice in functional spoken and written transactions in French. Prerequisites: FREN 201-202 or equivalent or consent of instructor. (UG)

FREN 341 FRENCH LISTENING COMPREHENSION PRACTICE (1) Practice in understanding spoken French, using recorded interviews, conversations, new programs from French radio, television films or videotapes. Prerequisite: FREN 301 or equivalent. (UG)

FREN 351 INTRODUCTION TO TRANSLATION: FRENCH ENGLISH (3) Training in translation, principally French to English, from magazines and books from a wide variety of disciplines. Prerequisites: FREN 301-302 or equivalent. (UG)

FREN 391 ADVANCED FRENCH GRAMMAR (3) French syntax, idiomatic construction, word formation. Conversation, oral and written drill. Conducted in French. Prerequisites: FREN 301, 302. (UG)

- FREN 401 [501] FRENCH PHONETICS (3)** Correction of French pronunciation and analysis or spoken French based on phonological theory. Prerequisites: FREN 301-302. (UG & G)
- FREN 402 [502] APPLIED FRENCH LINGUISTICS (3)** Phonetics, morphology, syntax, points of interference. Linguistic study relating to methodology for French teachers. Conducted in French. Prerequisite: FREN 301-302 or equivalent. (UG & G)
- FREN 411 [511] THE FRENCH NOVEL (3)** Study of the French novel and narrative techniques from the 17th century to the present day. Conducted in French. Prerequisites: FREN 321, 322 or equivalent. (UG & G)
- FREN 421 [521] FRENCH LITERATURE OF THE SEVENTEENTH CENTURY I (3)** Selected works from France's major classical writers. Conducted in French. Prerequisites: FREN 321-322. (UG & G)
- FREN 425 [525] FRENCH LITERATURE OF THE EIGHTEENTH CENTURY (3)** Principal works of the major writers presented in their literary, sociological and philosophical context. Conducted in French. Prerequisites: FREN 321 and 322. (UG & G)
- FREN 431 [531] FRENCH LITERATURE OF THE NINETEENTH CENTURY (3)** Selected works of major writers and of literary movements: Romanticism, Realism, Naturalism and Symbolism. Conducted in French. Prerequisites: FREN 321 and 322. (UG & G)
- FREN 437 [537] WOMEN WRITERS IN TRANSLATION (3)** A study of the writings and the image of women in languages other than English. Changing emphasis from semester to semester: focus on a theme, a period or a geographical area. Prerequisites: Three English courses, including ENGL 102 or ENGL 190, or permission of the instructor. Credit cannot be applied towards a major in a language. (UG & G)
- FREN 441 [541] FRENCH LITERATURE OF THE TWENTIETH CENTURY (3)** The evolution from fin de siècle to the present day of the novel, the theatre, and poetry as reflections of the artistic and philosophical developments leading to the modern age. Shifting emphasis from semester to semester. Conducted in French. Prerequisites: FREN 321, 322 or equivalent. (UG & G)
- FREN 451-452 [551-552] FRENCH POETRY I, II (3,3)** The development of French poetry from the Middle Ages to the present day. Conducted in French. Prerequisite: FREN 321, 322. (UG & G)
- FREN 461 [561] FRENCH DRAMA (3,3)** Development of the French theatre from medieval to modern times; its literature and staging, illustrated by representative plays. Shifting emphasis from semester to semester. Conducted in French. Prerequisites: FREN 321, 322. (UG & G)
- FREN 470-479 [570-579] SPECIAL TOPICS IN FRENCH (3)** Discussion of a central topic with changing emphasis from year to year. Prerequisite: FREN 321-322 or equivalent. (UG & G)
- FREN 483 [583] SPECIAL TOPICS IN FOREIGN LANGUAGE TEACHING (3)** Studies in the area of language teaching techniques with changing emphasis from year to year. Prerequisite: Consent of the department chair. (UG & G)
- FREN 487 TRAVEL AND STUDY ABROAD (4-15)** Study at a French University. Students will live and take courses at the University of Nantes, France. Dates: February through June (1 semester). Prerequisite: Three years of college French or equivalent. Consent of department chair. (UG)
- FREN 491 [591] DIRECTED READINGS IN FRENCH LITERATURE (1-3)** Reserved for superior students under the guidance of a departmental advisor. Conducted in French. Prerequisite: at least three hours of literature study at the 400 level, consent of department chair. (UG & G)
- FREN 492 [592] DIRECTED READINGS IN FRENCH (1-3)** Similar to FREN 491 with concentration on a different subject matter. Conducted in French. Prerequisite: at least three hours of literature study at the 400 level, consent of department chair. (UG & G)
- FREN 493 HONORS DIRECTED READINGS (3)** Individual readings and background research under direction of a faculty member in

preparation for writing an honor thesis. Prerequisite: Admission to the departmental Honors Program. (UG)

- FREN 495 PRACTICUM FOR THE CERTIFICATE OF PROFICIENCY IN FRENCH (3)** Supervised experience in a work setting providing students the opportunity to apply their classroom learning and skills outside the academic world. Will be one semester (Fall or Spring) for which students receive three credits for eight hours of work per week. Junior or senior undergraduate students in good academic standing and who meet the requirements established for the CERTIFICATE OF PROFICIENCY IN FRENCH should apply for the PRACTICUM during the month of November for the Spring semester and during the month of April for the Fall semester. Prerequisite: Open to students who are enrolled in the Certificate of Proficiency Program in French and who have complied with the program regulations. Written consent of Department Chair and Coordinator of the Program. (UG)
- FREN 497 INTERNSHIP IN FRENCH (3)** This program is designed to give training and experience using French in working with the government, business and industry in Maryland or Washington, D.C. under professional supervision. Prerequisites: Senior standing and written consent of chairman and coordinator or program. (UG)
- FREN 499 HONORS THESIS IN FRENCH (3-6)** Writing of an honors thesis based on individual research. Open only to advanced honors candidates. Prerequisites: Honors Directed Readings. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

- FREN 605 ETUDES ET TRAVAUX STYLISTIQUES (3)**
- FREN 633-634 SEMINAR ON FRENCH CLASSICISM I, II (3, 3)**
- FREN 638 SEMINAR IN 18TH CENTURY FRENCH LITERATURE (3)**
- FREN 639 THE ROMANTIC ERA IN FRANCE (3)**
- FREN 643-644 PERSPECTIVES DE CRITIQUE LITTERAIRE EN FRANCE (3, 3)**
- FREN 670-679 SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE AND CIVILIZATION (3)**

GENERAL EDUCATION (EDUC)

Lower Division

- EDUC 101 CAREERS IN EDUCATION (2)** Guided field experiences, designed to help students expand their knowledge of careers in education as a basis for choosing a major emphasis. Examination of careers in education and the scope of education in a democracy. (UG)
- EDUC 201 THE PARENTING PROCESS (3)** An appraisal of methods of parenting theories with specific references to Freud, Glasser, Harris, Ginott, Dreikurs, Gesell, Skinner, and Spock. Designed for those wishing to decide on parenting techniques and those who are professionals who counsel parents. Spring, Fall, Summer. (UG)

Upper Division

- EDUC 301 WRITING AND COMMUNICATION SKILLS FOR TEACHERS (3)** Practicum on development of written and oral communication skills needed in professional teaching situations. Focus will be on preparation of written materials which are appropriate for specific classroom and professional needs. Course content will be individualized to meet interests and needs of class members. Prerequisites: ENGL 102 or ENGL 190(104). (UG)
- EDUC 311 CREATIVE TUTORING (2)** A course designed to address the needs of college students who are interested in working with adults in a tutorial relationship. Students will receive instruction in methods and materials for tutoring. Must be taken on S/U basis. Prerequisite: PSYC 101 and consent of instructor. (UG)
- EDUC 325 FIELD EXPERIENCES: EDUCATION IN INFORMAL SETTINGS (1-3)** Studying and/or working with children in non-

classroom settings such as camps, recreational centers, or field trips. Individual plans of study and evaluation will be developed with the instructor. Prerequisite: Consent of instructor. (UG)

EDUC 401 [540] FOUNDATIONS OF EDUCATION (3) Sociological, philosophical, psychological and historical foundations of western education. Perspectives in these areas as they relate to current educational issues and practices. Three semester hours credit upon consent of department chair. Prerequisite: Student teaching and consent of chair, Department of Secondary Education. (UG)

EDUC 402 [502] HISTORY OF EDUCATION (3) Major developments, personalities, and movements in the evolution of education. (UG & G)

EDUC 403 [503] COMPARATIVE EDUCATION (3) A study of patterns of education in different cultural settings with implications for the student of American education. Emphasis on cross-cultural, political, economic and social aspects of education. Prerequisite: EDUC 401 or equivalent or consent of instructor. (UG & G)

EDUC 405 [505] PHILOSOPHY OF EDUCATION (3) Philosophic dimensions of the teaching learning process, as discriminated and discussed by major philosophers and education philosophers. (UG & G)

EDUC 406 [506] RECENT TRENDS IN TEACHING (3) Recent teaching strategies, organizational patterns and curricular innovations for levels K-12 are examined. Students may pursue individualized projects. Prerequisite: Student teaching or senior standing with consent of instructor. (UG & G)

EDUC 407 [507] CONTEMPORARY ISSUES IN EDUCATION (3) Seminar approach to current issues in education. Prerequisite: Student teaching or senior standing with consent of instructor. (No prerequisites when offered in day.) (UG & G)

EDUC 409 [509] FIELD STUDIES OF THE CHILD AND HIS COMMUNITY (2) Planning and working with groups of children in approved social agencies or making extensive studies of recreational and non-recreational social agencies. Class discussions and field trips. (UG & G)

EDUC 411 [511] OPEN EDUCATION: PHILOSOPHY AND PRACTICE (3) Philosophy and operation of open education schools, planning, management and evaluation. Emphasis on cognitive development. Prerequisite: Teaching experience. (UG & G)

EDUC 414 [614] EDUCATIONAL TESTS AND MEASUREMENTS (3) Problems in measurement; principles underlying choice of test instruments, survey of test literature; dealing with test data; correlation and interpretation of tests. (UG & G)

EDUC 415 [515] EDUCATIONAL STATISTICS (3) Designed as a practical course in statistics for the student in education. Emphasis is upon educational applications of descriptive statistics, including central tendency, variability, and association. Prerequisite: MATH 204, MATH 205 or equivalent. (UG & G)

EDUC 417 [517] CHILDREN'S LITERATURE (3) Study of the world of literature for children through wide independent reading as well as examination of non-print materials. Criteria and aids for selection. Attention to authors, illustrators, awards and citations. The importance of literature in the curriculum and in the lives of children. (UG & G)

EDUC 418 [518] YOUNG ADULT LITERATURE (3) Examination of literature as an expression of basic needs and ideas of youth through wide independent reading; studying criteria and aids for selection of books and other media; evaluating in terms of forces affecting society and the adolescent. (UG & G)

EDUC 419 [519] STORYTELLING (3) The selection and presentation of stories for children. A study of sources for the storyteller in folklore, myth, legend, poetry, and the writings of storytellers. Development of skills in storytelling. Prerequisite: EDUC 417 or consent of instructor. (UG & G)

EDUC 431 [531] THE SCHOOL CURRICULUM (3) An examination of curriculum patterns and practices; includes sociological, philosophical and psychological factors which shape the curriculum. Prerequisite: Student teaching or professional experience in education. (UG & G)

EDUC 445 [545] HUMAN RELATIONS AND THE INDIVIDUAL (3) Consideration given to: understanding one's self, the nature of prejudice and environmental factors which influence minority groups and cultures, and relationship of these factors to the development of meaningful educational programs. Prerequisites: For undergraduates: student teaching, and at least one course each in sociology and psychology. For graduates: teaching experience or certification. (UG & G)

EDUC 447 [547] NEW APPROACHES TO POSITIVE LEARNING CLIMATES (3) A study of the theories and skills of various communication and climate setting strategies through problem solving and increased insight about interpersonal relationships. Prerequisite: Teacher certification or consent of the instructor. (UG & G)

EDUC 449 [549] CITIZENSHIP EDUCATION IN THE SCHOOL (3) The development and implementation of activities for citizenship education in the school: philosophy, concepts, principles, techniques and resources for teacher and administrator. Prerequisites: EDUC 401 and ELED 375 or equivalents, consent of instructor, teaching experience. (UG & G)

EDUC 451 [551] GUIDANCE IN THE PUBLIC SCHOOL (2-3) Scope and function of a guidance program; the role of the classroom teacher in guidance. (UG & G)

EDUC 453 [553] SUPERVISORY PRACTICES IN TEACHER EDUCATION (3) Experiences and study in developing particular skills and competencies for supervising quality laboratory/field experiences. Content is designed for supervising teachers, team leaders, and resource personnel. Prerequisite: Teaching experience. Graduates count this as a workshop elective. (UG & G)

EDUC 455 [555] INTRODUCTION TO CAREER DEVELOPMENT EDUCATION: THEORY AND PRACTICE (3) Recent trends in career development school programs K-12; examining presently operating career programs; evaluating existing career materials; assessing attitudes toward work and the elements of career choice. Prerequisite: Undergraduate: six hours of psychology and senior standing; Graduate's, Bachelor's degree or equivalent. (UG & G)

EDUC 460 [560] TEACHING IN A MULTICULTURAL/MULTIETHNIC SOCIETY (3) The course will provide teacher education students with the background knowledge, understandings, and techniques to deal effectively with children from diverse cultural and ethnic backgrounds. Prerequisite: 3 credits in Education or PSYC 201. (UG)

EDUC 463 [563] SEX ROLE DEVELOPMENT IN THE SCHOOLS (2 or 3) An examination of theories of sex role development and their impact on educational methods and curriculum. Degree candidates must obtain permission of their graduate advisor. Staffed by Education Division. Assistance of Women's Studies staff may be utilized. The course will carry three credits when scheduled for three hours meeting per week and two credits when scheduled for two hours meeting per week. Prerequisite: 6 credits in Education. (UG & G)

EDUC 467 [567] TEAM TEACHING WORKSHOP (3) Conducted to assist teachers who are actively engaged in team teaching or will be participating as members of a team in the future. (UG & G)

EDUC 470-489 [570-589] SPECIAL TOPICS IN EDUCATION: (Topic to be named) (1-3) In-depth study of a selected topic in Education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time there is a topic scheduled. Graduate credit only with approval of the graduate program coordinator. Each topic may be taken as a separate course. (UG & G)

EDUC 494 [594] TRAVEL AND STUDY EDUCATION: (PROJECT TO BE NAMED) (1-6) Study abroad of educational facilities, programs or practices, or selected projects in educational topics. By specific arrangement with program chair and sponsoring instructors. Consent of graduate program coordinator required for graduate degree credit. (UG & G)

EDUC 495 [595] INDEPENDENT STUDY IN EDUCATION: (PROJECT TO BE NAMED) (1-4) An opportunity for especially qualified students to undertake research problems or study projects

relevant to their interest and training under the direction of a staff member. Prerequisite: approval of appropriate program chair. Graduate credit by consent of graduate program coordinator only. (UG & G)

EDUC 496 [596] DIRECTED READINGS IN EDUCATION (1-4)
Independent readings in selected areas of Education, in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the Department to major students. Prerequisite: approval of appropriate program chair. Graduate credit by consent of graduate program coordinator only. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

EDUC 601 EDUCATIONAL IDEAS IN HISTORICAL PERSPECTIVE (3)
EDUC 603 SCHOOL LAW (3)
EDUC 607 HOME, SCHOOL, COMMUNITY (3)
EDUC 611 SUPERVISION OF STUDENT TEACHING (3)
EDUC 614 EDUCATIONAL TESTS AND MEASUREMENTS FOR RESEARCH (3)
EDUC 621 READING DISABILITIES (3)
EDUC 622 CORRECTIVE READING (2-6)
EDUC 623 METHODS AND MATERIALS IN THE TEACHING OF READING (3)
EDUC 624 ORGANIZATION AND ADMINISTRATION OF READING AND STUDY SKILLS PROGRAMS IN HIGHER EDUCATION (3)
EDUC 625 METHODS AND MATERIALS FOR TEACHING READING IN HIGHER EDUCATION (3)
EDUC 626 CLINIC PRACTICUM IN READING (3-6)
EDUC 627 EVALUATION OF READING RESEARCH (3)
EDUC 628 DIAGNOSIS AND EVALUATION OF READING DISABILITIES (3)
EDUC 629 TESTS AND MEASUREMENTS IN READING-ADVANCED (3)
EDUC 641 TRANSACTIONAL ANALYSIS IN EDUCATION (3)
EDUC 645 THEORIES IN EDUCATIONAL ADMINISTRATION (3)
EDUC 646 HUMAN RELATIONS AND THE COMMUNITY (3)
EDUC 649 AMERICAN POLITICS AND EDUCATION (3)
EDUC 650 ANALYSIS AND MODIFICATION OF TEACHING BEHAVIOR (3)
EDUC 661 RESPONDING TO AND EVALUATING WRITING (3)
EDUC 667 WRITING AS THINKING (3)
EDUC 670-674 SPECIAL TOPICS IN EDUCATION (Topic to be named) (1-3)
EDUC 695 INDIVIDUALIZED STUDY (3-6)
EDUC 726 ADVANCED CLINIC PRACTICUM IN READING (3)
EDUC 729 SEMINAR IN READING (3)
EDUC 741 SEMINAR IN LIABILITY FOR PROFESSIONALS IN EDUCATION (3)
EDUC 745 SCHOOL BUDGETING AND FISCAL PLANNING (3)
EDUC 761 INTRODUCTION TO RESEARCH IN EDUCATION (3)
EDUC 762 INTRODUCTION TO EDUCATIONAL EVALUATION (3)
EDUC 770-774 SPECIAL TOPICS IN EDUCATION: (Topic to be named) (1-3)
EDUC 797 INTERNSHIP IN EDUCATION: (Assignment to be named) (1-6)
EDUC 898 MASTER EDUCATION THESIS (3)
EDUC 899 THESIS CONTINUUM (1)

GENERAL STUDIES (GENL)

Lower Division

GENL 101 THE STUDENT IN THE UNIVERSITY (3) The nature and purposes of higher education, and information and skills to enhance the success of individual students within this university and within other learning environments. Graded under S/U procedure. Course not open to those who have completed 9500.101. (UG)

GENL 103 INTRODUCTION TO HUMAN RELATIONS (3) An interdisciplinary course designed to present human relations skills emphasizing self awareness, interpersonal skills, and communication and listening skills. Experiential learning, role-playing situations, and real-life activities will be utilized. (UG)

GENL 121 PERSONAL LIFE AND CAREER PLANNING (2) To enable students to understand their role in the world of work, develop a sense of career directionality and maturity, explore concepts related to successful career choice, begin to take action toward achieving satisfactory life planning, in the context of a decision making format. (UG)

GENL 140 PERSPECTIVES ON ORIENTAL ARTS (3) Lectures, displays, and discussions by a number of experts on the various types of oriental art. The course is designed to acquaint the novice and the experienced as well with deeper insights into the oriental culture through an examination of art objects in the college's own collection; additional objects brought by guest speakers themselves, and by discussions led by guest experts. (UG)

GENL 196 SELECTED TOPICS IN GENERAL STUDIES (1-3) Study of a topic in a specialized area to be selected by the instructor and student. Each topic must be approved by the Curriculum Committee. Prerequisite: Permission of the Associate Dean. (UG)

GENL 198 PHILOSOPHY OF GENERAL STUDIES (3) An introduction to the concepts of a liberal education through readings, lectures, and discussions. Prerequisite: Must be taken simultaneously with GENL 199. (UG)

GENL 199 PRACTICUM IN GENERAL STUDIES (3) Life experiences in the major areas of a liberal education—museums, theatre, historical landmarks, concerts, etc. Prerequisite: Must be taken simultaneously with GENL 198. (UG)

GENL 203 HUMAN RELATIONS (3) Concepts of human relationships in a metropolitan environment, with examination of different life styles and values of the various groups found in our American society. Prerequisite: GENL 103 or consent of instructor.

GENL 211 EDITORIAL CARTOONING AND ITS PRACTITIONERS: JOURNALISM'S POLITICAL GADFLIES (2) This series of lectures by the former editorial cartoonist for the Baltimore NewsAmerican will look at the most lively aspect of the daily newspaper's editorial page. Included are a review of the history of editorial cartooning, an analysis of the works of some of today's most prominent cartoonists and insights into how editorial cartoons are created. No drawing or artistic talent will be required. (UG)

GENL 221 GAMBLING: HISTORY, THEORY AND PRACTICE (3) An academic interdisciplinary approach to an age-old activity. Emphasis on the history, psychology, sociology and mathematics of the practice of gambling, including its beneficial and detrimental aspects. Prerequisite: Sophomore standing. (UG)

GENL 241 THE ETHNIC EXPERIENCE IN AMERICA (3) The course will focus on Baltimore's ethnic groups as a microcosm of American society, and will examine the interaction of ethnic communities (Black, Jewish, Italian, Greek, Eastern-European, Irish, and others) in Baltimore. The interdisciplinary approach will use the talents of social scientists, community representatives, and public school personnel as consultants and guest lecturers. (UG)

GENL 251 THE CREATIVE PROCESS (3) A study of the nature and theories of the Creative Process. Instructional methods will include lecture and discussion. The student will be encouraged to explore his/her personal creative energy through awareness exercises, improvisation, creative potential experiences and discussion. (UG)

Upper Division

GENL 401 [501] TOPICS IN SOCIAL SCIENCE (3) Issues and problems to be selected by the instructor and studied from the multiple approaches of various social sciences. Prerequisite: 15 hours in the social sciences. (UG & G)

GENL 411 [511] CREATIVE METHODS OF SOLVING PROBLEMS WORKSHOP (3) The theory and practice of creative problem solving techniques. Analysis and practical application of creative processes with attention to skills in data gathering, problem analysis, idea production, solution evaluation, and strategy development for implementation. Individual and small group work will be employed. Prerequisites: PSYC 101 or EDUC 445 or GENL 203 or consent of instructor. (UG & G)

GENL 421 [521] INTERDISCIPLINARY WORKSHOP IN ASIAN STUDIES (3) Intensive study of a chosen region of Asia, including its physical environment, historical development, government, society, culture, and their interrelationship. An interdisciplinary team of faculty experts will participate, and the region of Asia will vary according to demand. Prerequisite: Approval of coordinator. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

GENL 601 INTRODUCTORY SEMINAR IN LIBERAL STUDIES (3)

GENL 602 CULMINATING SEMINAR IN LIBERAL STUDIES (3)

GENL 611 HUMANITIES SEMINAR (3)

GEOGRAPHY & ENVIRONMENTAL PLANNING (GEOG)

Lower Division

GEOG 101 PHYSICAL GEOGRAPHY (3) Introductory topical studies of fundamental natural and selected cultural phenomena in man's environment. Emphasis on climate, landforms, soils, vegetation, and minerals. (UG)

GEOG 102 WORLD REGIONAL GEOGRAPHY (3) Introductory regional studies of man in relation to his natural and cultural environments. Emphasis is on the distinctive and comparative nature of major regions; man's utilization and resources. (UG)

GEOG 105 GEOGRAPHY OF INTERNATIONAL AFFAIRS (3) An introductory survey of the changing political map of the world with special emphasis on a geographical comprehension of the major regions of international cooperation and conflict. (UG)

GEOG 109 INTRODUCTION TO HUMAN GEOGRAPHY (3) Uses the analytical approach of social sciences in the study of institutions of human society to reveal spatial patterns in the responses of men to basic problems and needs. (UG)

GEOG 221 INTERPRETATION OF MAPS (3) Introduction to map elements and map interpretation; study of various types of maps, index systems, and general application of maps in geography. (UG)

GEOG 251 INTRODUCTION TO URBAN PLANNING (3) The sequential origins of planning and urban design, a study of contemporary planning practice, and an analysis of the social, economic and political context of plan formulation and implementation. (UG)

GEOG 270.279 TOPICS IN PLANNING AND GEOGRAPHY (3) Investigation of various geographic and planning issues. Emphasis on analytical skills through readings and research design. Topics to be announced. (UG)

GEOG 299 INTRODUCTION TO SOURCE MATERIALS AND RESEARCH IN GEOGRAPHY (3) Designed to provide the student with a basic working knowledge of research materials; study and review of principal reference literature, journals, and other sources of data used in geographic field and library research. Students may be required to do field work. This course carries credit as an advanced writing course. (UG)

Upper Division

Systematic Courses

GEOG 315 GEOMORPHOLOGY (4) Detailed analysis of the formation, surficial characteristics and global distributions of the earth's landforms. Labs emphasize interpretation of landform assemblages through use of topographic maps and aerial photographs. Cannot be taken for credit by students who have received credit for PHSC 222 or GEOG 371. Prerequisite: Six hours of geography and/or geology including either GEOG 101 or PHSC 121. (UG)

GEOG 317 [502] ENERGY RESOURCES (3) Spatial patterns of traditional and alternative forms of energy will be analyzed. The many facets of the energy problem will be analyzed including physical deposits, economic variables, public policy implication, and geographical patterns. Prerequisite: 6 hours of Geography or consent of instructor. (UG & G)

GEOG 319 [503] SOILS AND VEGETATION (3) A resource study of the world's soils and plant formations with emphasis placed upon their genesis and spatial differentiations. Prerequisite: 6 hours of Geography, CHEM 101, BIOL 101 or 105. (UG & G)

GEOG 329 MEDICAL GEOGRAPHY (3) A study of health problems viewed as imbalances in the interrelationships between humans and elements of their environment, both the physical and cultural. Emphasis is placed on gaining an overview of the field through a comprehension of the application of geographic principles and techniques to the study of human health problems. Prerequisite: Six hours of geography or consent of instructor. This course carries credit as an advanced writing course. (UG)

GEOG 351 [509] URBAN DESIGN—MAN-SPACE-ENVIRONMENT (3) The physical planning process at the immediate, perceptual level. The relation of environment and behavior is explored, different urban areas are analyzed and a short design problem will be assigned. Prerequisite: GEOG 101-102 or consent of instructor. (UG & G)

GEOG 355 [510] HISTORICAL GEOGRAPHY OF URBANIZATION (3) Spatial and temporal development of urbanization and urban morphology from the rise of civilization in the ancient Near East to the contemporary post industrial city. The entire scope of urban functions is surveyed, with the emphasis on the city as a man-made environment. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 357 [511] CULTURAL GEOGRAPHY (3) Study of origins and diffusion of cultures and the resulting impact in creating the world's contrasting cultural landscapes. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 359 [512] ECONOMIC GEOGRAPHY (3) Designed to explain the location of economic activities through a series of principles and theories. Emphasis is on the various sectors of the economy, transportation, and economic development. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 363 [513] SPATIAL ORGANIZATION OF ECONOMIC ACTIVITY (3) Provides an intermediate level coverage of the organization of the economy of space. Draws from basis regional economics to illustrate and explain the geographical patterns of land use, industry, service activities, and regional patterns of economic development. Prerequisite: Six hours of geography including GEOG 359. (UG & G)

GEOG 371 [514] ADVANCED PHYSICAL GEOGRAPHY (4) Detailed analysis of characteristics, distribution, and geographical significance of the earth's landforms. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 373 [515] CLIMATOLOGY (3) Character, causes, and distribution of climatic types. Emphasis upon world patterns. Students may be required to do field work. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 375 [516] QUANTITATIVE METHODS IN GEOGRAPHY (3) Focus on statistical problems associated with the analysis of geographic data. Emphasis on the unique spatial problems of point pattern analysis, areal association, and regionalization. Pre-

requisite: Six hours of geography, or consent of instructor. (UG & G)

GEOG 377 [517] DESCRIPTIVE METEOROLOGY (4) An introduction to the various meteorological elements. Emphasis is placed on the interaction of temperature, pressure, wind, and moisture in creating weather patterns. Three hours of lecture and two hours of laboratory. Field work may be required. Prerequisite: Six hours of Natural Science or Geography or the equivalent. (UG & G)

GEOG 381 [519] POLITICAL GEOGRAPHY (3) Effect of political groupings upon man's use of the world, and the influence of the geographic base upon political power. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 385 [520] POPULATION GEOGRAPHY (3) General population theory, data sources for population geographers, and the processes of fertility, mortality, and migration. Patterns of population growth and change viewed from both temporal and geographical perspectives. Prerequisite: Six hours of Geography or consent of instructor. (UG & G)

GEOG 391 [522] URBAN SYSTEMS (3) Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic, and cultural phenomena. Field work. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 393 TRANSPORTATION AND INFRASTRUCTURE PLANNING (3) Transportation, water supply, wastewater treatment, and solid waste management systems. Their role in the growth and development of urban areas. Policies, programs, and infrastructure planning. Prerequisite: GEOG 391 or consent of instructor. (UG)

GEOG 401 [553] GROWTH OF GEOGRAPHIC THOUGHT (3) History, nature, and methodology of geography as a discipline. Analysis of schools of geographic thought; critical evaluation of important geographic work. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 403 [552] PLANNING IMPLEMENTATION (3) A study of the techniques involved in carrying out an urban plan. Zoning, subdivision control, public works policy and tax structures will be considered. The relation of planning to the political process will be emphasized. Prerequisite: GEOG 391 or equivalent and consent of instructor. (UG & G)

GEOG 405 [553] COMPREHENSIVE PLANNING (3) The integration of separate urban systems into the comprehensive design of an urban region. Special emphasis will be placed on neighborhood, community and town planning. Field work may be required. Prerequisite: GEOG 391 or equivalent and consent of instructor. (UG & G)

GEOG 407 THE GEOGRAPHY OF THE AGED (3) The aged have emerged in contemporary society as a significant minority group. Elements responsible for the increase in the numbers of older Americans will be examined as well as the forces affecting the distribution of the aged. Particular emphasis will be given to the locational problems of older people in urban areas. Prerequisite: Six hours of geography or consent of instructor. (UG)

GEOG 409 APPLIED CLIMATOLOGY (3) The effects of world climatic patterns on the human and physical environment are analyzed. Especial emphasis is devoted to the interaction between climate and the urban environment. Fieldwork necessary when taken for graduate credit. Prerequisite: GEOG 373, GEOG 377 or consent of instructor.

GEOG 410 ENVIRONMENTAL GEOGRAPHY (3) Energy, water, and mass budgets at the surface of the earth. Prerequisites: GEOG 101 and 3 additional credits of geography. (UG)

GEOG 411 [557] STUDIES IN NATURAL HAZARDS (3) The nature, frequency of occurrence, and distribution of environmental hazards and their impact on humans. Prerequisite: Six hours of Geography or consent of instructor. (UG & G)

GEOG 415 [559] GEOGRAPHICAL ASPECTS OF POLLUTION (3) A systematic study of the spatial aspects of air and water pollution, with special emphasis on pollution in the Greater Baltimore area. Field trips will be conducted to pollution sites and pollution con-

trol agencies within the local area. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 417 OUTDOOR RECREATION AND PLANNING MANAGEMENT (3) A study of outdoor recreation in terms of relationships of people, land, and leisure. Emphasis on the principles of planning, designing, and maintaining outdoor recreation areas and facilities. Prerequisite: Six hours of geography or consent of instructor. (UG)

GEOG 484 LAND USE PLANNING (3) Contemporary land use planning emphasizing the problematic nature of land development, the environmental land use planning process, and related growth management issues and techniques. Prerequisite: GEOG 251 or consent of instructor. (UG)

Technique Courses

GEOG 321 [504] INTERPRETATION OF AERIAL PHOTOGRAPHS (3) Reading and interpretation of aerial photographs. The application of the aerial photograph in the fields of geography, geology, and photogrammetry. (UG & G)

GEOG 323 [505] CARTOGRAPHY AND GRAPHICS I (3) Study in design, construction, and effective application of maps and charts for analysis and publication; practical exercises in the use of cartographic tools, materials, and techniques. (UG & G)

GEOG 324 [506] CARTOGRAPHY AND GRAPHICS II (3) Continued exercises in map graphics and areal distribution maps. New techniques in presentation of graphic data and spatial relationships. Prerequisite: GEOG 323. (UG & G)

GEOG 341 [508] TECHNIQUES AND MATERIALS FOR GEOGRAPHY TEACHERS (3) A systematic review of geographic concepts in relation to interdisciplinary studies in the physical and social sciences. Examination of the content of geography and problems of presentation. (UG & G)

Regional Courses

GEOG 420 [560] GEOGRAPHY OF ANGLO AMERICA (3) Physical and cultural landscapes of the United States and Canada including patterns of economic development of each region and their relationship to their environmental setting. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 423 [523] GEOGRAPHY OF MARYLAND (3) Physical and human geographical elements of the Maryland landscape which explain current patterns and environmental problems. Particular emphasis on historical geographical background of the present landscape. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 431 [562] GEOGRAPHY OF AFRICA (3) A systematic and regional approach to the study of people and environment of Africa, south of the Sahara. Special focus is placed on the distribution of natural resources and the historical-political development of each country as important background for the understanding of current African affairs. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 443 [564] GEOGRAPHY OF EAST ASIA (3) Regional studies of the physical and cultural foundations in China, Japan, and Korea. Emphasis upon human and economic resources, and role in world affairs. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

GEOG 445 GEOGRAPHY OF SOUTH AND SOUTHEAST ASIA (3) Regional studies of the physical and cultural foundations of India, Pakistan, Ceylon, Philippines, and Indonesia. Principal human and economic resources, problems of development, and role in world affairs. Prerequisite: Six hours of geography or consent of instructor. (UG)

GEOG 447 [565] GEOGRAPHY OF THE MIDDLE EAST (3) Analysis of Southwest Asia and North Africa, including major natural and cultural resources, related patterns of spatial organization, economic and political development, and associated problems. Prerequisite: Six hours of geography or consent of instructor. (UG & G)

- GEOG 448 CONFLICT IN IRELAND (3)** An analysis of attempted and proposed solutions to the Irish conflict based on physical and cultural elements of the island's historical geography. Prerequisite: Six hours of geography or consent of instructor. (UG)
- GEOG 451 [566] GEOGRAPHY OF EUROPE (3)** Regional analysis and appraisal of the human geography and natural resources of Europe. Problems of nationality, economic development, and cultural conflicts. Prerequisite: Six hours of geography or consent of instructor. (UG & G)
- GEOG 453 [567] GEOGRAPHY OF THE USSR (3)** Physical and cultural patterns and their bearing on the Soviet Union as a world power. Regional distribution and use of natural and human resources in agriculture and industry. Problems in economic development and production. Prerequisite: Six hours of geography or consent of instructor. (UG & G)
- GEOG 461 [568] GEOGRAPHY OF LATIN AMERICA (3)** Analysis of Latin America will be focusing on the interrelationships between physical and cultural elements which provide a diversity of human habitats throughout the region. Prerequisite: Six hours of geography or consent of instructor. May be repeated for a maximum of 6 credits. (UG & G)

Seminars And Special Courses

- GEOG 470-479 [570-579] SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)** Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: Six hours of geography or consent of instructor. (UG & G)
- GEOG 481 ENVIRONMENTAL IMPACT ANALYSIS (3)** The collection, collation, analysis, and incorporation of physical, social, biological, and economic information for the reviewing and the preparing of environmental impact statement (EIS) reports. Prerequisite: Six hours of geography or consent of instructor. (UG)
- GEOG 489 [581] SEMINAR: STUDIES IN ENVIRONMENTAL QUALITY (3)** Studies of selected problems in the quality of man's physical and cultural environments. Readings, discussions, and research on geographical and other aspects of man's use of natural resources and major forms of environmental pollution. Prerequisite: Six hours of Geography or consent of instructor. (UG & G)
- GEOG 491 [582] GEOGRAPHY/ENVIRONMENTAL PLANNING INTERNSHIP (1-6)** Supervised placement and research in selected public and private agencies at appropriate institutions. May be repeated up to a maximum of six credits. Prerequisite: Consent of chair and six hours in geography. May be repeated for a maximum of 6 credits. (UG & G)
- GEOG 493 [583] FIELD GEOGRAPHY (2-6)** Practical laboratory experience in techniques in the collection and analysis of data by observations, measurements, mapping, and photographic records. Such techniques are to be applied to selected geographic problems. Prerequisite: Six hours of geography or consent of instructor. (UG & G)
- GEOG 494 [584] TRAVEL AND STUDY (3-6)** Countries and topics to be selected by departments and instructors sponsoring the program. For complete information contact the chair of the department. May be repeated for a maximum of 6 credits. Prerequisite: Consent of instructor. (UG & G)
- GEOG 495 [585] DIRECTED READING IN GEOGRAPHY (3)** Independent reading in selected areas of geography. Open by invitation of the geography department to students taking a major or minor in geography. Prerequisite: 15 hours in geography and a minimum average of 3.0 in geography. May be repeated for a maximum of 6 credits. (UG & G)
- GEOG 496 [586] INDEPENDENT STUDY IN GEOGRAPHY (1-6)** Independent research, study, or field experience under supervision of a member of the Geography faculty. Designed for advanced students who wish to conduct independent investigations on aspects of Geography which are of special interest or not covered in other courses. Registration arranged with department chairperson. Prerequisite: Advanced undergraduate standing with at least 18 hours in geography or graduate standing. May be repeated for a maximum of 6 credits. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

- GEOG 601 GEOGRAPHIC METHODOLOGY AND TECHNIQUES: TRENDS & PROSPECTS (3)**
- GEOG 621 RESEARCH TECHNIQUES IN GEOGRAPHY (3)**
- GEOG 631 REMOTE SENSING (3)**
- GEOG 641 APPLIED PHYSICAL GEOGRAPHY (3)**
- GEOG 642 ENVIRONMENTAL POLLUTION (3)**
- GEOG 651 SEMINAR IN APPLIED POPULATION GEOGRAPHY (3)**
- GEOG 652 SEMINAR IN MEDICAL GEOGRAPHY (3)**
- GEOG 661 STUDIES IN ECONOMIC GEOGRAPHY (3)**
- GEOG 671 STUDIES IN PHYSICAL GEOGRAPHY (3)**
- GEOG 672-679 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)**
- GEOG 681 SEMINAR IN POLITICAL GEOGRAPHY (2-6)**
- GEOG 683 SEMINAR: ENVIRONMENTAL PROBLEMS IN MARYLAND (3)**
- GEOG 691 URBAN GEOGRAPHY STUDIES (2-6)**
- GEOG 701 LAND USE STUDIES (2-6)**
- GEOG 771 SEMINAR IN REGIONAL GEOGRAPHY (2-6)**
- GEOG 797 RESEARCH (2-6)**
- GEOG 898 MASTER'S THESIS IN GEOGRAPHY (3-6)**
- GEOG 899 THESIS CONTINUUM (1)**

GERMAN (GERM)

Lower Division

- GERM 101-102 GERMAN ELEMENTS I, II (4, 4)** A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation. (UG)
- GERM 111 ELEMENTARY GERMAN CONVERSATION (1)** Drill of common spoken German phrases. Prerequisite: GERM 101 or equivalent. (Not open to students who have completed GERM 202 or above.)
- GERM 201-202 GERMAN INTERMEDIATE I, II (4, 4)** Review of grammar; conversation and prose composition; reading of texts of cultural value. Conducted in German. Prerequisite: GERM 101-102 or equivalent. (UG)

Upper Division

- GERM 301-302 COMPOSITION AND CONVERSATION I, II (3, 3)** Composition and conversation beyond the intermediate level. Conducted in German. Prerequisite: GERM 201-202 or equivalent. (UG)
- GERM 303 GERMAN STYLISTICS (3)** Development of writing skills with stress on language structure and important aspects of style. Prerequisite: GERM 301-302 or the equivalent. (UG)
- GERM 311 CULTURE AND CIVILIZATION (3)** A brief survey of the history, geography, and institutions of Germany. Conducted in German. Prerequisite: GERM 201-202 or equivalent. (UG)
- GERM 321 SURVEY OF GERMAN LITERATURE (3)** German literature from the eighteenth century to the present. Conducted in German. Prerequisite: GERM 201-202 or equivalent. (UG)
- GERM 331 GERMAN FOR BUSINESS (3)** Vocabulary and phraseology of German business correspondence for active and passive use in a business environment. Prerequisite: GERM 201-202 or equivalent. (UG)
- GERM 341 READINGS IN CONTEMPORARY GERMAN (3)** Reading and comprehension of non literary texts. Prerequisite: GERM 201-202 or consent of instructor. (UG)
- GERM 391 ADVANCED GERMAN GRAMMAR (3)** German syntax, idiomatic construction, word formation, original composition.

Conversation and oral drill. Conducted in German. Prerequisite: GERM 301-302. (UG)

GERM 401 GERMAN PHONETICS (3) The pronunciation of contemporary German, drill in pronunciation. Prerequisite: GERM 301-302. (UG & G)

GERM 427 [527] GERMAN CLASSICISM (3) Goethe, Schiller, Lessing and others. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 431 [531] ROMANTICISM (3) German literature during the Romantic era (1790-1830). Hoelderlin, Novalis, Brentano, Tieck, Grillparzer. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 441 [541] MODERN GERMAN LITERATURE (3) The modern masters; Kafka, Mann, Hesse, Rilke, Brecht. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 442 [542] GERMAN LITERATURE SINCE 1945 (3) Themes and movements since World War II. Poetry: Eich, Enzensberger, Celan, Bachmann; prose fiction: Boell, Grass; drama: Borchert, Duerrenmatt, Frisch. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 461 [561] GERMAN DRAMA OF THE 19TH AND 20TH CENTURIES (3) The development of modern German drama in the successive literary movements, beginning with Kleist. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 465 [565] GOETHE'S FAUST (3) A study of the background, themes and structures of this masterpiece. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 470-479 [570-579] SPECIAL TOPICS IN GERMAN (3) Discussion of a central topic with changing emphasis from year to year. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 481 [581] THE GERMAN NOVELLE (3) The theory and development of the Novelle in German literature from Goethe to the present. Conducted in German. Prerequisite: GERM 321 or equivalent. (UG & G)

GERM 483 [583] SPECIAL TOPICS IN FOREIGN LANGUAGE TEACHING (3) Studies in the area of language teaching techniques with changing emphasis from year to year. Prerequisite: Consent of the department chair. (UG & G)

GERM 491-492 [591-592] DIRECTED READINGS IN GERMAN (1-3, 1-3) Reserved for superior students under the guidance of a departmental advisor. Content related to student's previous program. Prerequisite: at least three hours of study at the 400 level, consent of department chair. (UG & G)

GERM 495 PRACTICUM FOR THE CERTIFICATE OF PROFICIENCY IN GERMAN (3) Supervised experience in a work setting providing students the opportunity to apply their classroom learning and skills outside the academic world. Will be one semester (Fall or Spring) for which students receive three credits for eight hours of work per week. Junior or senior undergraduate students in good academic standing and who meet the requirements established for the CERTIFICATE OF PROFICIENCY IN GERMAN should apply for the PRACTICUM during the month of November for the Spring semester and during the month of April for the Fall semester. Prerequisite: Open to students who are enrolled in the Certificate of Proficiency Program in German and who have complied with the program regulations. Written consent of Department Chair and Coordinator of the Program. (UG)

GERM 497 INTERNSHIP IN GERMAN (3) This program is designed to give training and experience using German in working with the government, business and industry in Maryland or Washington, D.C. under professional supervision. Prerequisite: Senior standing and written consent of chair and coordinator of program. (UG)

GREEK (GRK)

Lower Division

GRK 101-102 ELEMENTS OF MODERN GREEK I, II (3, 3) A thorough foundation in grammar; drills in pronunciation; elementary conversation and composition; introduction to Greek culture. (UG)

HEALTH SCIENCE (HLTH)

Lower Division

HLTH 101 CURRENT HEALTH PROBLEMS (3) Health problems of current interest or importance on an individual, community, national, and international basis. Includes a general overview of the state of the nation's health. (UG)

HLTH 103 EMERGENCY MEDICAL CARE (3) Designed for people who may be called upon to give first aid and cardiopulmonary resuscitation in the course of their daily activities. Course content will include the Red Cross Standard First Aid and Personal Safety Course and CPR instruction. Certification by the American Red Cross and the Heart Association will be given in Standard First Aid and CPR respectively. (UG)

HLTH 104 PARENTAL AND CHILD HEALTH (3) An introduction to parental and child health in its contemporary, social, and cultural setting. Discussion will include parenthood, prenatal care, growth and development of the child, the school environment, physical handicaps, and public health programs serving the maternal, infant, and preschool populations. Prerequisite: HLTH 101. (UG)

HLTH 107 INTRODUCTION TO HEALTH PROFESSIONS (3) An analysis of professional opportunities in related health fields. Students will be provided the opportunity to interact and discuss the professional role of health educators, medical technologists, occupational therapist, speech language pathologist, and many other health professionals. Students will explore job opportunities and credentialing requirements for each of these programs. (UG)

HLTH 201 INTRODUCTION TO SCHOOL HEALTH (3) A general overview of the school health program, examination of various pertinent curriculum designs, and detailed instruction in structuring weekly and daily sequential planning. Prerequisite: HLTH 101. (UG)

HLTH 202 PRINCIPLES AND PRACTICES IN COMMUNITY HEALTH (3) A survey of community health principles and skills including: public health sciences, behavioral sciences, political legal sciences, and clinical sciences comprising the field of community health. Prerequisite: HLTH 101. (UG)

HLTH 203 FIRST AID INSTRUCTORS (2) American Red Cross First Aid Course for instructors certification. Prerequisite: HLTH 103.

HLTH 204 ELEMENTS OF NUTRITION (3) A pragmatic approach to nutrition that analyzes nutrients in relation to everyday living. Emphasis is placed on education activities concerning nutrition through the life cycle. (UG)

HLTH 206 HEALTH AND URBAN LIVING (3) Study of those conditions of urban living with particular relevance for the health and well-being of urban dwellers. Nature, extent, and programs and problems in dealing with atmospheric pollution, water supply, housing, sanitation, behavioral disorders, mental illness, communicable disease, etc. Prerequisites: HLTH 101, SOCI 101. (UG)

HLTH 207 HEALTH CARE IN THE UNITED STATES (3) A survey course which analyzes the demand, cost, supply and providers of health care. The position and behavior of the health care recipient, analysis of different health care settings and factors such as professionalism, the professional education system, authority structures, ethical responsibilities, referral, cost accountability and how they affect and define methods for delivery of health care services. (UG)

HLTH 208 MENTAL HEALTH (3) A study of the positive aspects of mental health and interpersonal relationships. Emphasis is placed

on self-actualization, the helping relationships, constructive confrontation, and mental health roles in school and community. Prerequisite: HLTH 101. (UG)

HLTH 209 CONSUMER BEHAVIOR (3) Examination of consumer behavior in light of psychological, sociological, and ecological principles. Taught on an interdepartmental basis with the Psychology Department. Prerequisites: HLTH 101, PSYC 101. (UG)

HLTH 211 SCHOOL HEALTH FOR PHYSICAL EDUCATION MAJORS (3) An overview of the total school health program and its relationship to community health, techniques of teacher appraisal, and services rendered to the school health program. Prerequisite: HLTH 101. (UG)

HLTH 213 SCHOOL HEALTH FOR EARLY CHILDHOOD AND ELEMENTARY MAJORS (3) A general introductory overview of the total school health program, examination of various pertinent health curriculum designs, exposure to available methods of instruction in health education, practicum in designing weekly and daily lesson plans, and resources available to assist health instruction. Prerequisite: HLTH 101. (UG)

HLTH 221 HUMAN SEXUALITY (3) An individually oriented discussion course designed to explore the multi-disciplinary scope of human sexuality. An in-depth look at the physiological, psychological, emotional, cultural, and social aspects of human sexuality will focus on establishing one's sexuality as a health entity. Prerequisite: HLTH 101. (UG)

HLTH 225 WEIGHT CONTROL: THEORY AND PRACTICE (3) The theoretical and the practical aspects of losing, gaining, or maintaining weight. Recent medical and behavioral literature will be reviewed. Opportunities will exist in class to make application of the theories. Prerequisite: HLTH 101 or permission of instructor. (UG)

Upper Division

HLTH 301 INSTRUCTIONAL METHODOLOGY IN SCHOOL HEALTH (3) An in-depth consideration of the total school health program with emphasis on interpretation of school health services, analysis of selected health education curriculum guides, development of teaching materials, and actual observation and participation in health education in elementary and secondary schools. Prerequisites: HLTH 101, HLTH 201, MATH 237 or SCED 414. (UG)

HLTH 302 PREPARATION FOR FIELD WORK IN COMMUNITY HEALTH (3) Examination of techniques needed to work in various community health capacities; observation of community health situations. Prerequisites: HLTH 202, MATH 237 or SCED 414. (UG)

HLTH 305 COMMUNITY HEALTH ADMINISTRATION (3) A survey of current approaches to the theories, practices and organization of community health services administration. Prerequisite: HLTH 202. (UG)

HLTH 311 CHRONIC AND COMMUNICABLE DISEASE (3) A factual, non-clinical approach to the major chronic and communicable diseases that are health problems in the United States population today. Patient education methods and the role of the health educator in relation to these diseases will be stressed. Prerequisites: HLTH 101, BIOL 101 (BIOL 315 strongly recommended). (UG)

HLTH 321 CRISIS INTERVENTION (3) Various crisis situations and approaches to intervention in handling these situations will be covered in the course. Examples of specific crisis concerns that will be dealt with are: Drugs, sex, death, suicide, handicaps, mental illness, diseases, and family and peer groups. Prerequisite: HLTH 101 or consent of instructor. (UG)

HLTH 331 NUTRITION FOR HEALTH PROFESSIONALS (3) An in-depth study of chemical nature and utilization of nutrients; the composition, digestion, absorption of foods, and the normal nutritional requirements of the human body. The focus of the course will be on nutrition and health, and nutrition and disease. Prerequisite: CHEM 101, BIOL 101, or consent of instructor. (UG)

HLTH 401 [501] SEX EDUCATION AND FAMILY LIFE (3) Designed for the present and future teacher, the course includes an overview of human sexuality. Emphasis will be placed on the need for education about sexuality, theories of sexual education, selection of content, sequential unit planning, survey and availability of A-V materials and the qualifications of the effective sex educator. Prerequisites: HLTH 221 or HLTH 101, PSYC 101, BIOL 101. (UG & G)

HLTH 402 [502] HEALTH SEMINAR (3) Examination of recent trends in school and community health, reports of student projects, consultation with experts in health field. Prerequisite: Consent of department chairperson. (UG & G)

HLTH 403 [503] HEALTH EDUCATION CURRICULUM (3) Development of school health education programs based on health needs and problems of school children. Prerequisites: HLTH 101, HLTH 201. (UG & G)

HLTH 405 [505] DRUGS IN OUR CULTURE (3) An in-depth review of harmless, harmful, useful and useless substances which may affect behavior or mood; the interaction of psychological, sociological and physiological components included. Prerequisite: HLTH 101. (UG & G)

HLTH 411 [511] HEALTH AND LATER MATURITY—THE AGING PROCESS (3) An approach to the conservation of human resources with emphasis on understanding attitudes and practices related to health in later maturity. Designed for students with a personal or professional interest in the field. Prerequisite: Six hours of health and/or behavioral science or consent of instructor. (UG & G)

HLTH 421-422 FIELD WORK IN COMMUNITY HEALTH (1-14) Practical experience in participation in community health situations. Total number of credits accumulated may not exceed 14 for both 421 and 422. Graded under S/U procedure. Prerequisite: HLTH 302; upper-division Health elective. (UG)

HLTH 451 [551] ECOLOGICAL ASPECTS OF HEALTH (3) An examination of the interrelationship between man and his environment. Emphasis is placed upon health aspects of pollution, housing, sanitation, radiation, behavioral disorders and epidemiology. Prerequisite: BIOL 101 or 110; HLTH 101 or consent of instructor. (UG & G)

HLTH 470-479 [570-579] HEALTH WORKSHOP (3) For teachers, administrators, and individuals concerned about health related fields. Contemporary health aspects are considered with emphasis on implementation of positive behavior aimed at improving the health of the individual and the community. Students who elect this course for six credits will participate in two workshops. Enrollment is limited to 25. Prerequisite: HLTH 101 or consent of instructor. (UG & G)

HLTH 491 [591] HEALTH DIRECTED READINGS (1-3) Independent reading in health or related disciplines. Prerequisite: A minimum of 10 credits in health and consent of department chair. (UG & G)

HLTH 494 [594] TRAVEL AND STUDY (3) An examination of various types of health care delivery in the countries and cities visited in comparison with that of the United States. For complete information contact chair of the department. Prerequisites: HLTH 101 and either HLTH 201 or HLTH 202 or consent of instructor. (UG & G)

HLTH 495 [595] INDEPENDENT STUDY (3) Directed study on specific problems in health and related fields. Prerequisite: Consent of department chair and 12 hours in health. (UG & G)

Graduate Division

See TSU Graduate School Catalog for course descriptions.

HLTH 601 PROBLEMS IN SCHOOL HEALTH (3)

HLTH 611 CURRENT LITERATURE IN HEALTH (3)

HLTH 613 ANALYSIS OF PHYSIOLOGICAL CONCEPTS (3)

HLTH 615 QUALITATIVE & QUANTITATIVE ELEMENTS (3)

HLTH 617 HEALTH ADMINISTRATION (3)

- HLTH 625 RESEARCH METHODS IN HEALTH (3)
 HLTH 631 PROGRAM PLANNING IN HEALTH EDUCATION (3)
 HLTH 633 HEALTH CARE SYSTEMS (3)
 HLTH 635 EDUCATIONAL STRATEGIES FOR HEALTH (3)
 HLTH 637 SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING (3)
 HLTH 639 EDUCATION AND TRAINING IN HEALTH CARE (3)
 HLTH 641 PATIENT EDUCATION: INTRODUCTION AND APPLICATION (3)
 HLTH 643 HEALTH EDUCATION: CURRICULUM DEVELOPMENT AND SUPERVISION (3)
 HLTH 651 PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY (3)
 HLTH 670-679 SPECIAL TOPICS (3)
 HLTH 689 FIELD EXPERIENCE (3-6)
 HLTH 691 DIRECTED READINGS IN HEALTH (3)
 HLTH 785 GRADUATE SEMINAR IN HEALTH (3)
 HLTH 787 HEALTH SCIENCE INTERNSHIP (9)
 HLTH 897 GRADUATE PROJECT IN HEALTH SCIENCE (3)
 HLTH 898 MASTER'S THESIS IN HEALTH (3)
 HLTH 899 THESIS CONTINUUM (1)

HEBREW (HEBR)

Lower Division

- HEBR 101-102 ELEMENTS OF HEBREW I, II (3, 3) An introduction to Hebrew. Speaking, reading, and writing, the development of conversational ability, free composition, and translation from English to Hebrew. Credit given on completion of both semesters. (UG)
 HEBR 201-202 HEBREW INTERMEDIATE I, II (3, 3) A continued review of grammatical structure with emphasis on conversational and reading fluency. Vocabulary building, composition and reading and discussion of selected outside readings. Prerequisite: HEBR 101-102. (UG)
 HEBR 205 CONTEMPORARY HEBREW LITERATURE (3) Survey of selected short stories in English translation from the time of the tsars in Russia to Israel today. Prerequisites for course: None. (UG)

Upper Division

- HEBR 391 READINGS IN MODERN HEBREW LITERATURE (3)
 The reading and literature analysis of selected short stories by the major writers of Hebrew literature in Israel today. Conducted in Hebrew. Prerequisite: HEBR 201.202 or equivalent or consent of instructor.

HINDI (GENL)

Lower Division

- GENL 117-118 HINDI ELEMENTS I, II (3, 3) A thorough foundation in grammar; drills in pronunciation; elementary conversation; vocabulary; reading; compositions and translation. (UG)

HISTORY (HIST)

Lower Division

- HIST 101 INTRODUCTION TO ANCIENT CIVILIZATION (3) Political, social, economic, and intellectual forces which shaped the pattern of Near Eastern and European life from the Stone Age through the decline of the Roman Empire. (UG)
 HIST 107 INTRODUCTION TO HISTORY OF ISLAMIC CIVILIZATION (3) Survey of the history and culture of the Islamic

peoples from Muhammed to the present. Emphasis on the Arabic nations. (UG)

- HIST 109 INTRODUCTION TO THE CIVILIZATION OF INDIA (3) Development of the culture of South Asia from earliest times and the emergence of the present nations of Bangladesh, Pakistan, India, and Sri Lanka (Ceylon). (UG)
 HIST 116 INTRODUCTION TO CHINESE CIVILIZATION (3) Survey of Chinese history and cultural development from prehistoric times until the confrontation with the Western World in the nineteenth and twentieth centuries. (UG)
 HIST 117 INTRODUCTION TO JAPANESE CIVILIZATION (3) Survey of Japanese history and cultural development from prehistoric times until the coming of the West to Japan in the nineteenth and twentieth centuries. (UG)
 HIST 121 LATIN AMERICA: COLONIAL PERIOD (3) Political, economic, and social developments in Portuguese and Spanish America from the pre-Columbian period to the movements for independence. (UG)
 HIST 122 LATIN AMERICA: NATIONAL PERIOD (3) Struggle for political, economic, and social stability, international relations and cultural patterns in the development of independent Latin America in the nineteenth and twentieth centuries. (UG)
 HIST 123 HISTORY OF THE CARIBBEAN AND CENTRAL AMERICA (3) Survey of the cultures and people of the Caribbean and Central American region from the period of Spanish, French, and English colonialism to the 20th century emergence of modern states and modern conflicts. (UG)
 HIST 133 HISTORY OF AFRICA: EARLIEST TIMES TO THE NINETEENTH CENTURY (3) Multi-disciplinary approach to the study of selected pre-colonial African societies and the nature of their early relations with Europe. Emphasis on sub-Saharan Africa. (UG)
 HIST 134 HISTORY OF AFRICA: NINETEENTH CENTURY TO THE PRESENT (3) Survey of the history of Africa from the period immediately prior to the imposition of colonial rule to the present. Emphasis on sub-Saharan Africa. (UG)
 HIST 145 HISTORY OF THE UNITED STATES TO THE MIDNINETEENTH CENTURY (3) Political, economic, social, and cultural forces which shaped the pattern of life in the United States from the founding of the colonies to 1865. (UG)
 HIST 146 HISTORY OF THE UNITED STATES SINCE THE MID-NINETEENTH CENTURY (3) Continuation of HIST 145 from 1865 to the present. (UG)
 HIST 147 HISTORY OF WOMEN IN AMERICA: 1600 TO THE PRESENT (3) Economic, social, and political activities of women in America since 1600. Emphasis on the roles of race, class, ethnicity, religion and region. (UG)
 HIST 149 THEMES IN UNITED STATES HISTORY (3) Thematic approach to the history of the United States focusing on a significant subject selected by the instructor. May be repeated with a different theme for a total of six credits. (UG)
 HIST 151 THE WORLD SINCE 1945 (3) Major historical developments in the post WWII era including postwar diplomacy, the Cold War in Europe and Asia, nationalism, the Mideast problem, the Vietnam war, East-West detente, the nuclear arms race, and political and economic problems in the Third World. (UG)
 HIST 201 SURVEY OF ENGLISH HISTORY TO 1783 (3) Evolution of the political, legal, social, economic, and cultural institutions of England and the spread of the Empire overseas. The triumph of Parliament over the monarchy and the development of individual rights of Englishmen. (UG)
 HIST 202 BRITISH HISTORY SINCE 1783 (3) Struggle against France, the Industrial Revolution, and the rise of the bourgeoisie to political control. The spread of the empire, the symbolism of the Victorian era, and the revolution of democratic processes. (UG)
 HIST 211 CHRISTIANITY FROM JESUS TO LUTHER (3) History of Christianity from the origin through the Protestant Reformation. Emphasis on the interaction between ecclesiastical institutions and social change. (UG)

- HIST 231 HISTORY OF RUSSIAN CIVILIZATION (3)** Political, social, economic, and intellectual forces which shaped the pattern of Russian life from the ninth to the end of the nineteenth century. (UG)
- HIST 241 HISTORY OF EUROPEAN CIVILIZATION THROUGH THE SEVENTEENTH CENTURY (3)** Political, social, economic, and intellectual forces which shaped the pattern of European life from post-Roman times through the seventeenth century. (UG)
- HIST 242 HISTORY OF EUROPEAN CIVILIZATION FROM THE SEVENTEENTH CENTURY (3)** Political, social, economic, and intellectual forces which shaped the pattern of European life from the seventeenth century to the present. (UG)
- HIST 245 HISTORY OF EUROPEAN WOMEN (3)** Perception of women and their social, religious, and economic role in Europe from the Greeks to the French Revolution. (UG)
- HIST 275 THE HISTORY OF ANCIENT ISRAEL (3)** Survey of the history and culture of the Israelites from Moses to the second Jewish revolt under Bar-Kokhba in 135 C.E. (UG)
- HIST 277 A SURVEY OF JEWISH HISTORY (3)** Political, cultural, and socio-economic experiences of world Jewry from the Diaspora to the present. Emphasis on the nineteenth and twentieth centuries. (UG)
- HIST 280-289 TOPICS IN HISTORY (3)** Development of writing skills and analytical thinking through the study of selected subjects in history; lectures, discussions, compositions, and examinations. (For specific topics see schedule booklet.) Prerequisite: ENGL 102 or ENGL 190. (UG)
- HIST 290 INTRODUCTION TO HISTORICAL STUDY (3)** Survey of historical writings, the theory of history, introduction to research. Prerequisite: ENGL 102 or ENGL 190. (UG)

Upper Division

- HIST 301 [501] ANCIENT NEAR EASTERN CIVILIZATIONS (3)** Civilizations of Mesopotamia and Egypt and the peripheral developments in Syria-Palestine and Asia Minor. Prerequisite: HIST 101 or consent of instructor. (UG & G)
- HIST 303 [503] HELLENISTIC CIVILIZATION (3)** The civilization that arose in the Mediterranean Basin after the conquests of Alexander and the Roman Empire within this context. Prerequisite: HIST 101 or consent of instructor. (UG & G)
- HIST 304 [504] ANCIENT GREEK CIVILIZATION (3)** The civilization of classical Greece, including the Minoan and Mycenaean bronze age antecedents, to 362 B.C. Prerequisite: HIST 101 or consent of instructor. (UG & G)
- HIST 305 [505] ROMAN CIVILIZATION (3)** The civilization of ancient Rome from the foundation of the city to the collapse of the Roman empire in the West. Prerequisite: HIST 101 or consent of instructor. (UG & G)
- HIST 311 [509] TRADITIONAL INDIA: ITS HISTORICAL DEVELOPMENT (3)** Development of the history and culture of India from prehistoric times until the beginnings of European dominance in the eighteenth century. Prerequisite: Six credits in history or consent of instructor. (UG & G)
- HIST 312 [510] HISTORY OF MODERN INDIA (3)** History of the Indian subcontinent since 1750, stressing the rise of British power, the colonial experiences, the development of nationalist movements, and the problems of independence in present-day India, Pakistan, and Bangladesh. Prerequisite: Six credits in history or consent of instructor. (UG & G)
- HIST 313 [511] HISTORY OF MODERN SOUTHEAST ASIA (3)** Development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam and the Philippines since 1500, with emphasis on the colonial experience and development of modern nationhood. Prerequisite: Six credits in history or consent of instructor. (UG & G)
- HIST 316 [513] REVOLUTIONARY CHINA (3)** Study of the history of revolution in China beginning with the nineteenth century backdrop to revolution and analyzing the Nationalist-Communist struggles and the on-going revolution in post-1949 China. Prerequisite: HIST 116 or six credits in history. (UG & G)
- HIST 317 [515] MODERN JAPAN (3)** Study of the nineteenth century modernization of Japan, the road toward war against the U.S., the aftermath of the war and Japan's phenomenal economic growth in the post-war period. Prerequisite: HIST 117 or six credits in history or consent of instructor. (UG & G)
- HIST 321 [521] HISTORY OF MEXICO: PRE-COLUMBIAN AND COLONIAL (3)** Political, economic, social, and cultural developments from early pre-Columbia civilizations to the movement for independence. Prerequisite: Six credits in lower division history. (UG & G)
- HIST 322 [522] HISTORY OF MEXICO: NATIONAL PERIOD (3)** Political, economic, social, and cultural developments from independence to the present. Prerequisite: Six credits in lower division history. (UG & G)
- HIST 323 [523] THE SOCIAL HISTORY OF LATIN AMERICA (3)** History of social problems, popular culture, political movements, and revolutionary change in modern Latin American societies. Emphasis on the effects of social changes on men and women in the 19th and 20th centuries. Prerequisite: 6 credits of history, or a course in Latin American history, or consent of instructor. (UG & G)
- HIST 325 [524] HISTORY OF INDIANS IN LATIN AMERICA: MAYA, AZTEC AND INCA (3)** Ethno-historical examination of the social, economic and political aspects of some of the major indigenous civilizations of Latin America prior to the arrival of the first Europeans, with special attention to Maya, Aztec and Inca civilizations. Prerequisite: Three credits in history or anthropology or consent of instructor. (UG & G)
- HIST 327 [525] BUSINESS HISTORY OF LATIN AMERICA (3)** Study of business, commerce, industry, finance and agriculture in Latin America from the colonial period to the present. Prerequisite: Three credits in history and either consent of instructor or junior standing. (UG & G)
- HIST 329 [529] THE HISTORY OF LATIN AMERICAN WOMEN (3)** Survey of Latin American women in the history of Spanish and Portuguese America from the colonial period in the 16th century to the present. Prerequisite: Three credits in history or women's studies courses, or consent of the instructor. (G & G)
- HIST 331 [531] AMERICAN MILITARY HISTORY SINCE 1865 (3)** Campaigns, tactics, and institutional development of the armed forces in the context of American politics and diplomacy with emphasis on the period since 1917. Prerequisite: HIST 146. (UG & G)
- HIST 345 [533] THE AMERICAN COLONIES: 1492-1763 (3)** Founding and the political, economic, and social development of the American colonies. Prerequisite: HIST 145 or HIST 241 or consent of instructor. (UG & G)
- HIST 346 [534] THE AMERICAN REVOLUTIONARY PERIOD: 1763-1789 (3)** From the end of the Seven Years' War to the ratification of the Constitution. Prerequisite: HIST 145 or HIST 241 or consent of instructor. (UG & G)
- HIST 347 [535] THE EARLY NATIONAL PERIOD (3)** The United States from the Constitutional Convention to the Election of 1820. The Federalist Decade and the Jeffersonian Era. Prerequisite: HIST 145. (UG & G)
- HIST 348 [536] THE JACKSONIAN ERA (3)** The United States from 1815 to 1845; political, social, and economic currents of the period. Prerequisite: HIST 145. (UG & G)
- HIST 349 [537] THE CIVIL WAR (3)** Sectionalism, the coming of the war, and the war years. Emphasis on political, economic, and social issues. Prerequisite: HIST 145. (UG & G)
- HIST 350 [538] THE ERA OF RECONSTRUCTION (3)** Political, economic, and social study of the Reconstruction era, the war years to 1877, and its aftermath. Prerequisite: HIST 145. (UG & G)
- HIST 351 [539] THE U.S. 1865-1901: AGE OF ENTERPRISE (3)** Industrialization of the United States, the rise of big business and

- an examination of resulting problems in economic, social and political life. Prerequisite: HIST 145 or HIST 146. (UG & G)
- HIST 352 [540] THE U.S. 1892-1920: AGE OF REFORM (3)** America's efforts to deal with the political, social, and economic problems of industrial life; emphasis on the Populist movement; imperialism and the Spanish-American War; the administrations of Theodore Roosevelt, William Howard Taft, and Woodrow Wilson. Prerequisite: HIST 145 or HIST 146. (UG & G)
- HIST 359 [541] THE F.D.R. ERA (3)** History of the United States from the 1920's through World War II, with emphasis on the presidential years of Franklin D. Roosevelt. Prerequisite: HIST 146. (UG & G)
- HIST 360 [542] RECENT AMERICAN HISTORY: 1945-1975 (3)** History of the United States from World War II through the mid 1970's, including political, social, economic, and diplomatic developments. Prerequisite: HIST 146. (UG & G)
- HIST 361 [543] AMERICAN INTELLECTUAL AND RELIGIOUS HISTORY (3)** Analysis of the main religious and philosophical issues in United States history, especially Puritanism, Enlightenment, Transcendentalism, Darwinism and Pragmatism. Prerequisite: A course in United States history or American literature. (UG & G)
- HIST 363 [544] SOCIAL HISTORY OF THE UNITED STATES TO 1865 (3)** American life to the Civil War, focusing on social structure, mobility, race, ethnicity, family, roles of women, religious and educational institutions, community, and popular culture. Prerequisite: HIST 145. (UG & G)
- HIST 364 [545] SOCIAL HISTORY OF THE UNITED STATES SINCE 1865 (3)** American life from the Civil War, focusing on social structure, mobility, race, ethnicity, family, roles of women, religious and educational institutions, community, and popular culture. Prerequisite: HIST 146. (UG & G)
- HIST 366 [546] A HISTORY OF AMERICAN BUSINESS (3)** Study of industry, finance, commerce and agriculture from the Civil War to the present. Prerequisite: Three credits in history and either consent of instructor or junior standing. (UG & G)
- HIST 367 [547] THE DEVELOPMENT OF THE U.S. CONSTITUTION: 1787-1941 (3)** Intellectual and political influences which produced the Constitution of 1787, the struggle between national supremacy and state sovereignty up to the Civil War, and the development of the new judicial review after 1870. Prerequisite: HIST 145 and HIST 146. (UG & G)
- HIST 368 [548] THE U.S. CONSTITUTION AND CIVIL LIBERTIES: 1941 TO THE PRESENT (3)** The state of civil liberties issues before the ascendancy of the Warren Court, the revolution which it brought about in the interpretation of the Bill of Rights and the Equal Protection Clause, subsequent efforts to deal with that revolution. Prerequisite: HIST 146. (UG & G)
- HIST 369 [549] DIPLOMATIC HISTORY OF THE UNITED STATES TO 1900 (3)** Evolution of the American national interest in foreign relations with Europe, Latin America, and the Far East from colonial times to 1900. Emphasis upon the changing character and role of objectives, policies, commitments, and forces. Prerequisite: HIST 145 or HIST 146. (UG & G)
- HIST 370 [550] DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3)** Continuation of HIST 369 to the present with added interest in the emergence of the United States as a major world power. The role of the United States in modern warfare, world wide economic and financial affairs, overseas expansion, the diplomatic impact of conflict in ideologies, and current international crisis. Prerequisite: HIST 145 or HIST 146. (UG & G)
- HIST 373 [551] EARLY AMERICAN FRONTIER (3)** The westward movement and the effect of the frontier process on social, economic, and political institutions of the United States and the attitudes of the American people to 1850. Prerequisite: HIST 145. (UG & G)
- HIST 374 [552] THE FAR WESTERN FRONTIER (3)** Expansion into the Trans-Mississippi West and the impact of the frontier process on the attitudes of the American people and on the social, economic, and political institutions of the United States in the nineteenth and twentieth centuries. Prerequisite: HIST 146. (UG & G)
- HIST 375 [553] THE CITY IN AMERICAN HISTORY (3)** Development of the American city and its impact on society, culture, ethnicity, race relations, the roles of women, economics and politics. Prerequisite: 3 credits in United States history. (UG & G)
- HIST 377 [554] THE IMMIGRANT IN AMERICAN HISTORY (3)** History of the immigrant experience in America from the colonial period to the present. Emphasis on migration patterns, receptivity of native society, assimilation and acculturation processes. Prerequisites: HIST 145 and HIST 146. (UG & G)
- HIST 379 [555] HISTORY OF NATIVE AMERICANS: THE EAST (3)** Topical and regional ethnohistory of the native peoples of Eastern America, and their relations with non-native peoples and governments, precontact to the present. Prerequisite: Three credits in American history. (UG&G)
- HIST 380 [556] HISTORY OF NATIVE AMERICANS: THE WEST (3)** Topical and regional ethnohistory of the native peoples of Western America and their relations with non-native peoples and governments, precontact to the present. Prerequisite: 3 credits of American history. Not open to those who have completed Indian-White Relations in American History. (UG & G)
- HIST 381 [557] HISTORY OF AFRO-AMERICANS (3)** History of Americans of African ancestry from their West African background to the present. Emphasis on black Americans' thought, activities, organizations, and their role in developing America. Prerequisites: HIST 145 and HIST 146. (UG & G)
- HIST 385 [558] AMERICAN LABOR (3)** The changing nature of agricultural, domestic, and industrial work; business-labor relations; labor unions and leaders; role of labor in mainstream and radical political movements. Emphasis on the late nineteenth and twentieth centuries. Prerequisite: HIST 146 or three credits in economics. (UG & G)
- HIST 391 [559] HISTORY OF CANADA (3)** Canadian history with emphasis on the period since 1867. Particular attention will be given to the problems of cultural dualism and confederation. Prerequisite: HIST 145 or HIST 146 or HIST 242 or POSC 101. (UG & G)
- HIST 397 [560] HISTORY OF MARYLAND FROM COLONIAL TIMES TO THE PRESENT (3)** Major events and forces that have shaped the political, social, cultural, and economic development of Maryland. Prerequisite: Three credits in United States history. (UG & G)
- HIST 398 [561] HISTORY OF BALTIMORE (3)** Origin and growth of Baltimore focusing on culture, ethnicity, social structure, economics, the roles of women, and political events and forces. Prerequisite: 3 credits in United States history. (UG & G)
- HIST 401 [567] THE EARLY MIDDLE AGES: 300-1050 (3)** The rebuilding of Europe after the collapse of the Roman Empire. Emphasis on the Church Fathers, the Germanic tribes, Carolingian culture, Feudalism and the Vikings. Prerequisite: HIST 241 or HIST 211 or consent of instructor. (UG & G)
- HIST 402 [568] THE HIGH MIDDLE AGES: 1050-1350 (3)** The flowering of medieval culture. Emphasis on the role of the church, the emergence of the national monarchies of western Europe, and the creation of towns and universities. Prerequisite: HIST 241 or HIST 211 or consent of instructor. (UG & G)
- HIST 403 [569] THE RENAISSANCE ERA: 1300-1500 (3)** Political, economic, social, and cultural changes in late medieval and Renaissance Europe. Prerequisite: HIST 241 or 2205.211 or consent of instructor. (UG & G)
- HIST 404 [570] THE REFORMATION: 1500-1648 (3)** Religious, political, economic, and social changes in Reformation and Counter Reformation Europe. Prerequisite: HIST 241 or HIST 211 or consent of instructor. (UG & G)
- HIST 405 [571] EUROPE: 1648-1815 (3)** European state system and expansion of European civilization; intellectual growth and class relationships culminating in the French Revolution and Napoleon. Prerequisite: HIST 242. (UG & G)

- HIST 406 [572] EUROPE: 1815-1914 (3)** Major economic, political, social, and intellectual currents of the period. The effects of the industrial revolution, the development of nationalism and imperialism, and the origins of World War I. Prerequisite: HIST 242. (UG & G)
- HIST 407 [573] EUROPE: 1914-1939 (3)** Events leading to World War I, the conflict, and the peace which followed. The rise of conflicting political ideologies and the road to World War II. Prerequisites: HIST 241 and HIST 242. (UG & G)
- HIST 408 [574] EUROPE SINCE 1939 (3)** World War II—diplomacy, strategy, and results. The economic, social, and political recovery of postwar Europe and the development of new alliance structures. Prerequisites: HIST 241 and HIST 242. (UG & G)
- HIST 413 [575] EUROPEAN MILITARY HISTORY: 1871-1945 (3)** The two world wars, pre-war and inter-war military developments, and civil-military relations seen in the context of diplomatic and socioeconomic history. Prerequisite: HIST 242 or consent of instructor. (UG & G)
- HIST 415 [576] DIPLOMATIC HISTORY OF EUROPE: 1815-1939 (3)** A study in depth of specific diplomatic crises, with emphasis upon the impact of each upon the European Balance of Power. Prerequisite: HIST 242. (UG & G)
- HIST 417 [577] ECONOMIC HISTORY OF EUROPE TO THE MID-EIGHTEENTH CENTURY (3)** Study of European economy to the middle of the eighteenth century. Particular attention will be given to the development of commerce, capitalism, manufacture, and mercantilism. Prerequisite: HIST 241. (UG & G)
- HIST 418 [578] ECONOMIC HISTORY OF EUROPE SINCE THE MID-EIGHTEENTH CENTURY (3)** Industrialization of Great Britain, France, Germany, Russia, and peripheral nations from the middle of the eighteenth century. Prerequisite: HIST 242. (UG & G)
- HIST 420 [579] EUROPEAN IDEAS: FRENCH REVOLUTION TO THE PRESENT (3)** Religious, scientific, political, and social theories of the European intellectual class seen in their historical context from the French Revolution to the present. Prerequisite: HIST 242 or consent of instructor. (UG & G)
- HIST 421 [580] GREAT BRITAIN IN THE TWENTIETH CENTURY (3)** Political, social, and economic developments in Great Britain from 1897 to the present with emphasis on social reform, the two World Wars, Socialism and the Labour Party, economic decline, the dismantling of the Empire, and entry into the European community. Prerequisite: HIST 201 or HIST 202 or HIST 242. (UG & G)
- HIST 431 [581] FRANCE: 1763-1871 (3)** Old Regime and the impact of successive revolutions upon French society. Emphasis upon the role of France in the growth of European liberalism and nationalism. Prerequisite: HIST 242. (UG & G)
- HIST 441 [582] GERMANY: 1871-1945 (3)** Brief topical analysis of the nineteenth century background. Concentration on the Bismarckian Empire, Weimar Republic, and the Third Reich, emphasizing the interrelationships between internal developments and Germany's role in Europe and the world. Prerequisite: HIST 242. (UG & G)
- HIST 451 [583] HISTORY OF IMPERIAL RUSSIA: 1682-1894 (3)** Political history and theory, social relations, economic, cultural and literary development, and growth of the Russian state from Peter the Great until the advent of Nicholas II. Prerequisite: HIST 242. (UG & G)
- HIST 452 [584] RUSSIA/SOVIET UNION: 1894-1953 (3)** Political, ideological, economic, and cultural factors influencing the fall of the monarchy, the Bolshevik Revolution, Leninism, and Stalinism. Prerequisite: HIST 231 or 242 or consent of instructor. (UG & G)
- HIST 453 [585] HISTORY OF SOVIET RUSSIA SINCE STALIN: 1953 TO PRESENT (3)** Topical analysis of political history and theory, economic development, foreign affairs, social changes, and cultural and literary trends. Prerequisite: HIST 151 or 231 or 242 or consent of instructor. (UG & G)
- HIST 454 [589] THE FOREIGN POLICY OF THE SOVIET UNION (3)** An examination of the twin pillars of Soviet foreign policy since 1917: international Marxism and the defense of Mother Russia. Prerequisite: HIST 151 or HIST 231 or HIST 452 or HIST 453 or POSC 432 or consent of instructor. (UG & G)
- HIST 477 [586] EUROPE IN THE THIRD WORLD: COLONIALISM TO CRISIS (3)** Impact of modern European Colonialism on the societies of the Third World, chiefly Africa and Asia. Primary emphasis on the nineteenth and twentieth centuries. Prerequisite: HIST 242 or consent of instructor. (UG & G)
- HIST 479 [587] A HISTORY OF DIPLOMACY (3)** Evolution from its origins to the present with emphasis on the modern period. Historic changes which shifting ideologies and new technologies have wrought in the role of the diplomat. Prerequisites: HIST 241 and HIST 242. (UG & G)
- HIST 481 [588] HISTORY OF MANAGEMENT (3)** Theory, organization, and operation of selected political, religious, military, economic, and social institutions of the western world. Prerequisite: Three credits in history and either consent of instructor or Junior standing. (UG & G)
- HIST 483 [593] DIRECTED INDIVIDUAL RESEARCH (2-4)** Research and reading dealing with a historical topic to be selected by the instructor and student; considerable attention to methodology; may be repeated for a total of six credits. Prerequisites: Fifteen credits in history and a minimum average of 3.0 in history and consent of instructor and Department Chair. (UG & G)
- HIST 485 HISTORY SEMINAR (3)** Research and writing in a specific period and area of history to be selected by the instructor; may be repeated in a different topic for a total of six credits. Prerequisites: Consent of instructor and fifteen credits in history including HIST 290. (UG)
- HIST 490 [590] INTERPRETIVE PROBLEMS IN HISTORY (3)** In-depth study of historical interpretations of selected topics; may be repeated in a different topic for a total of six credits. Prerequisite: Twelve credits in history appropriate to topic. (UG & G)
- HIST 491 [591] BIOGRAPHICAL STUDIES IN HISTORY (3)** Study of selected historical figures who have shaped or reflected the past. Figures to be selected by the instructor; may be repeated in different historical figures for a total of six credits. Prerequisite: Six credits in history appropriate to topic. (UG & G)
- HIST 492 [592] HISTORICAL THEMES (3)** Study through lectures and discussions of a historical topic selected by the instructor; may be repeated in a different topic for a total of six credits. Prerequisite: Six credits in history appropriate to topic. (UG & G)
- HIST 493 PRACTICUM (3-6)** Experience designed to combine the research and content of history with work in historical libraries, museums, archival depositories, and similar agencies. No more than six credits to be earned with any one agency; may be repeated for a total of six credits. Prerequisites: Twenty-seven credits in history and consent of Department Chair. Graded under S/U procedure. (Not for Graduate Credit.) (UG)
- HIST 494 [594] TRAVEL AND STUDY (3-6)** Countries and topics to be selected by the Departments and instructors sponsoring the program. For complete information, write the Chair of the Department early in the fall of the academic year preceding the semester of intended study; may be repeated in different countries and topics for a total of six credits. Prerequisites: Upper division status and consent of instructor. (UG & G)
- HIST 496 [596] COLLOQUIUM (3)** Group discussion of reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with broad periods, topics, problems or comparative developments selected by the instructor(s); may be repeated in a different topic for a total of six credits. Prerequisites: Consent of instructor and fifteen credits in history or nine credits in history and six credits in the related discipline. (UG & G)
- HIST 497 [597] DIRECTED READING (2-4)** Independent reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific periods, topics, problems or comparative developments selected by the student

in consultation with the instructor(s); may be repeated for a total of six credits. Prerequisites: Fifteen credits in history or nine credits in history and six credits in the related discipline and a minimum average of 3.0 in history and the related discipline and consent of Department Chair. (UG & G)

HIST 498 HONORS DIRECTED READINGS (2-4) Independent reading in history or related disciplines on a topic selected by the student in consultation with the instructor(s); may be repeated for a total of 6 credits. Prerequisite: Admission to the Departmental Honors Program. (UG)

HIST 499 HONORS THESIS (4-8) Research and the writing of a thesis, to be directed by a faculty member in a chosen area of specialization. Prerequisite: Admission to Departmental Honors Program. (Not for Graduate Credit.) (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

HIST 783 DIRECTED INDIVIDUAL RESEARCH (2-4)

HIST 797 DIRECTED READING IN HISTORY (2-4)

HUMAN RESOURCE MANAGEMENT (Personnel)

Upper Division

HRM 381 HUMAN RESOURCE MANAGEMENT (3) Techniques and issues in acquiring, developing, motivating, and maintaining a competent work force. Topics include equal employment opportunity, human resource planning, recruitment and selection, training and development, performance evaluations, motivation, compensation and benefits, labor relations and safety and health. Prerequisites: Junior standing, MNGT.361. (UG) (Not open to those who completed 0506.381, 0515.381 or Personnel Management.)

HRM 433 WAGE AND SALARY ANALYSIS (3) Analysis and management of compensation systems. Job evaluation, wage levels, wage structures and wage planning for the public and private sectors. Prerequisites: Senior standing, MNGT.363, HRM 381. (UG) (Not open to those who have completed 0506.433 or 0515.433.)

HRM 451 INDUSTRIAL RELATIONS (3) Nature, development, and process of labor-management relationships. Labor laws, organizing, contract negotiations, grievances and arbitration, and future issues for unions. Prerequisites: Senior standing, HRM 381. (UG) (Not open to those who completed 0506.451 or 0515.451.)

HRM 470-479 SPECIAL TOPICS IN HUMAN RESOURCE MANAGEMENT (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current management practices. Prerequisite: consent of instructor. Special permit only. (UG) (Not open to students who have taken 0506.470-479.)

HRM 491 DIRECTED READINGS (Human Resource Management) (1-3) Readings in selected functional or conceptual areas of human resource management. Prerequisite: Senior standing, special permit requirements. (UG) (Not open to students who have taken 0506.491.)

HRM 495 INDEPENDENT RESEARCH (Human Resource Management) (1-3) Directed research on specific problems in a functional area of human resource management. May be re-elected for a maximum total of 6 credits. Prerequisite: Junior standing, all 200 and 300 level BUAD core courses, special permit requirements. (UG) (Not open to students who have taken 0506.495.)

HRM 497 PRACTICUM: Human Resource Management (3) Students are required to work in assigned projects in actual business environments. Priority will be given to seniors. Graded under S/U procedure. May be re-elected for a maximum total of 6 credits. NOTE: A cumulative grade point average of at least 2.50 is required. Prerequisite: Consent of instructor. Special permit. [Co-op Fee Required] (Not open to students who have taken 0506.497.) (UG)

Graduate Division

See *TSU Graduate School Catalog* for course description.

HRM 670-679 SPECIAL TOPICS IN HUMAN RESOURCE ADMINISTRATION (3)

HRM 695 INDEPENDENT STUDY IN HUMAN RESOURCE ADMINISTRATION (3)

INSTRUCTIONAL TECHNOLOGY (ISTC) (See General Education Department)

Lower Division

ISTC 101 UTILIZATION OF LIBRARY RESOURCES (3) A course designed to provide the undergraduate student with essential background skills in library use. Emphasis is placed on developing effective and efficient methods of using the card catalog, bibliographies, general and specialized reference works, government documents, and non-print materials. Instruction includes the methodology of writing a term paper. Not open to students who have completed 4901.004. (UG)

ISTC 269 LABORATORY IN INSTRUCTIONAL HARDWARE (1-2) The course will emphasize the development of skills required in the operation of selected instructional hardware. a. Required of all Secondary Education majors during student teaching; ISTC 301 may also be used to fulfill this requirement. b. Not open to students who have completed ISTC 301 or ISTC 415. (UG)

Upper Division

ISTC 301 [501] UTILIZATION OF INSTRUCTIONAL MEDIA (23) Materials, devices, techniques and settings are presented in an overview of the field of instructional technology. Laboratory experiences are provided in the operation of instructional hardware. Must be taken for two hours credit if student has taken ISTC 269. Prerequisite: Junior standing or above or departmental approval. (UG & G)

ISTC 302 DESIGN AND PRODUCTION OF INSTRUCTIONAL MATERIALS (3) Students are required to design and produce selected instructional materials. Prerequisite: Junior standing or above or departmental approval. (UG)

ISTC 304 THE PRODUCTION OF INSTRUCTIONAL PRESENTATIONS (3) Emphasis is placed on both the basic knowledge and skills necessary to produce instructional presentations in four major formats: audio tape, video format, synchronized slide-tape program, and super 8mm film properly sequenced. Student acquires experience in producing each of the four types of productions as well as developing instructional guides accompanying each. Prerequisite: Junior standing or above. (UG)

ISTC 305 WRITING SKILLS FOR MEDIA CAREERS (3) Development of competencies for the specialized writing of professional careers in media. Prerequisites: ENGL 102 or ENGL 190 (104) and 6 credits in ISTC or consent. (UG)

ISTC 311 MEDIA CENTER ADMINISTRATION (3) An examination of the organization and administration of media centers for service to students and faculty in school settings such as self-contained classrooms, open-space schools, and in independent study situations. Specific topics studied include planning and equipping media centers, routines, budgets, personnel, and criteria for evaluating school media services. Prerequisite: Junior standing or above. (UG)

ISTC 313 EVALUATION AND SELECTION OF MEDIA (3) A study of evaluating techniques for print and nonprint media. Prerequisite: Junior standing or above. (UG)

ISTC 397 PRACTICUM: THE MEDIA CENTER IN THE ELEMENTARY SCHOOL (6) Supervised media center practice in an elementary or middle school. Prerequisite: ISTC 475. Admission by consent of department coordinator, approval of Director of Center for Applied Skills Test. 2.75 GPA. Graded under S/U procedure. Application must be made to ISTC Coordinator by mid-semester prior to semester of enrolling. (UG)

ISTC 398 PRACTICUM: THE MEDIA CENTER IN THE SECONDARY SCHOOL (6) Supervised media center practice in a secondary school. Prerequisite: ISTC 477. Admission by consent of department coordinator, approval of Director of Center for Applied Skills in Education and completion of Basic Skills Test. 2.75 GPA. Graded under S/U procedure. Application must be made to ISTC Coordinator by mid-semester prior to semester of enrolling. (UG)

ISTC 423 [523] INSTRUCTIONAL MOTION PICTURE FILMMAKING I (3) This course provides an introduction to the production of motion picture films designed for instructional use. Included in the course are basic film-making techniques, scripting, editing, and a survey of motion filming equipment. Prerequisite: Junior standing or above. (UG & G)

ISTC 431 [531] INTRODUCTION TO INSTRUCTIONAL TELEVISION (3) The course will explore the design and production of non-commercial television programming for training and education. Basic production of student videotapes, script planning and instructional design competencies will be emphasized. Prerequisite: Junior standing or above. (UG & G)

ISTC 441 [541] COMPUTER TECHNOLOGY AND UTILIZATION (3) Exploratory course concerned with the rationale for and use of computers in learning and related administrative matters. Techniques are examined for the organization, storage, processing, and retrieval of data. Applications include the computer for instruction, the management of instruction, simulation, generation of graphics, and accounting for software and hardware. (Note: The course will not prepare students for occupations in computer science.) Prerequisite: Junior standing or above. (UG & G)

ISTC 453 [553] INTRODUCTION TO INSTRUCTIONAL PHOTOGRAPHY (3) This course presents basic planning and darkroom methods for preparing photographic materials. Although the thrust of the course is the black and white mode, color slides and other special topics are treated. Principles of visual literacy are stressed. Students are required to demonstrate competencies in darkroom utilization and print critiqueing as well as print production. Prerequisite: Consent of Department Chair. (UG & G)

ISTC 471 [571] REFERENCE AND INFORMATION SOURCES (3) The bibliographic method, fundamental reference sources, and searching techniques for print and non-print materials are examined. Students are required to demonstrate competencies in the use of reference sources. Prerequisite: Junior standing or above. (UG & G)

ISTC 473 [573] CATALOGING AND CLASSIFICATION OF MEDIA (3) Cataloging, subject analysis, classification and bibliographic control. The use of commercial processing services and central processing in the school system. The concept of a unified catalog and materials center for print and non-print materials is stressed. Prerequisite: Junior standing or above. (UG & G)

ISTC 475 METHODS FOR MEDIA PERSONNEL IN THE ELEMENTARY SCHOOL (2) The evaluation of the school library media center's function and services in curriculum work with teachers and students. Methods of preparing and utilizing the media program. (To be taken prior to EDUC 397 Practicum: The Media Center in the Elementary School.) Prerequisite: Admission by consent of the ISTC Coordinator. Special Permit. Graded under S/U procedure. (UG)

ISTC 477 METHODS FOR MEDIA PERSONNEL IN THE SECONDARY SCHOOL (2) The evaluation of the school library media center's function and services in curriculum work with teachers and students. Methods of preparing and utilizing the media program. (To be taken prior to EDUC 398 Practicum: The Media Center in the Secondary School.) Prerequisite: Admission by consent of the ISTC Coordinator. Special Permit. Graded under S/U procedure. (UG)

ISTC 495 INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (1-3) Individual and supervised study of research problems and special projects in specific areas of instructional Technology. Prerequisites: Junior standing or above and special permit. (UG)

ISTC 497 INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (6) The student under faculty and professional supervision works in

a library media setting. Prerequisites: Major, Senior standing, and consent of program coordinator and completion of BASIC SKILLS TEST. Application must be made to ISTC Coordinator by mid-semester prior to semester of enrolling. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

ISTC 601 ORGANIZATION AND ADMINISTRATION OF MEDIA CENTER PROGRAMS (3)

ISTC 615 MEDIA SELECTION (3)

ISTC 633 INSTRUCTIONAL TELEVISION (3)

ISTC 634 INDEPENDENT STUDY: INSTRUCTIONAL MOTION PICTURE FILMMAKING II (3)

ISTC 655 MEDIA DESIGN AND PRODUCTION I (3)

ISTC 656 MEDIA DESIGN AND PRODUCTION II (3)

ISTC 663 APPLIED PSYCHOLOGY OF LEARNING (3)

ISTC 667 INSTRUCTIONAL DEVELOPMENT (3)

ISTC 671 ADVANCED REFERENCE (3)

ISTC 673 INSTRUCTIONAL FACILITIES DESIGN (3)

ISTC 674-679 TOPICS IN INSTRUCTIONAL TECHNOLOGY (3-6)

ISTC 685 SEMINAR IN INSTRUCTIONAL TECHNOLOGY (3)

ISTC 687 COMPUTER ASSISTED INSTRUCTION (3)

ISTC 691 DIRECTED READINGS IN INSTRUCTIONAL TECHNOLOGY (3)

ISTC 695 INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (3)

ISTC 789 PRACTICUM IN INSTRUCTIONAL TECHNOLOGY (6)

ISTC 795 INTRODUCTION TO RESEARCH IN INSTRUCTIONAL TECHNOLOGY (3)

ISTC 797 INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (3)

ISTC 898 MASTER'S THESIS IN INSTRUCTIONAL TECHNOLOGY (3 or 6)

ISTC 899 THESIS CONTINUUM (1)

ITALIAN (ITAL)

Lower Division

ITAL 101-102 ITALIAN ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation. (UG)

ITAL 201-202 ITALIAN INTERMEDIATE I, II (4, 4) Review of grammar, conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: ITAL.101-102 or equivalent. (UG)

Upper Division

ITAL 301-302 ITALIAN COMPOSITION AND CONVERSATION I, II (3, 3) Composition and conversation beyond the intermediate level. Conducted in Italian. Prerequisite: ITAL.201-202, or equivalent. (UG)

ITAL 321-322 SURVEY OF ITALIAN LITERATURE I, II (3, 3) A thorough examination of Italian literature from the thirteenth century to the present. Conducted in Italian. Prerequisite: ITAL.201-202. (G)

JAPANESE (JPNS)

Lower Division

JPNS 101-102 JAPANESE ELEMENTS I, II (3, 3) Development of elementary vocabulary and sentences, forms of written language, conversation, composition and translation. This course will be given using the techniques of programmed instruction. (UG)

JPN 201-202 JAPANESE INTERMEDIATE I, II (3, 3) Review of elementary Japanese; intermediate Kanji; conversation and prose composition; translations; outside readings commensurate with the ability of individual student. This course will be given using the techniques of programmed instruction. Prerequisite: JPN 101-102. (UG)

LATIN (LATN)

Lower Division

LATN 101-102 LATIN ELEMENTS I, II (3, 3) The fundamentals of Latin grammar will be taught and related to French, Italian, and Spanish. Selections from elementary texts will be read. (UG)

LATN 201-202 LATIN INTERMEDIATE I, II (3, 3) Students will read selections from Caesar's Gallic War, Cicero's Cataline, Pro Archia, De Senectute de Amicitia. Sentences will be translated from English to Latin. Grammar will be reviewed. Prerequisite: LATN 101-102 or consent of instructor. (UG)

MANAGEMENT (MNGT)

Upper Division

MNGT 355 INTRODUCTION TO INTERNATIONAL BUSINESS (3) International payments, importing and exporting, foreign investment, market entry, foreign taxation, international business law. Prerequisite: junior/major standing or consent of instructor. (UG) (Not open to students who have taken 0506.355, OR 0513.355, OR INBU.355.)

MNGT 361 MANAGEMENT THEORY (3) Nature, development and future prospects of management and organization theory. Management functions and processes in terms of planning, organizing, leading, controlling, and communications. Exploration of social responsibility of business and international management. Special permit required. Prerequisites: Junior Standing, ECON 201 and 202. (UG) (Not open to students who have taken 0506.361 or 0597.361.)

MNGT 363 QUANTITATIVE METHODS FOR BUSINESS I (3) Coverage of quantitative techniques which have been proven successful in management practice. Topics include linear programming, transportation, decision theory, project scheduling, and forecasting. Prerequisites: Junior standing, MNGT 361, core Computer Science Course, MATH 231. (UG) (Not open to those who have taken 0506.363 or 0597.363.)

MNGT 365 PRINCIPLES OF PRODUCTION AND OPERATIONS MANAGEMENT (3) An overview of management strategies and techniques for controlling both service and manufacturing operations. Topics include product and process design, simulation, queuing, computer integrated manufacturing, job design, the learning curve, work measurement, materials management, quality management, and international competition, and production issues. Prerequisites: Junior standing, MNGT 361 & MNGT 363. (UG) (Not open to those who completed 0506.365 or 0597.365 or Principles of Production Management.)

MNGT 437 MANAGEMENT INFORMATION SYSTEMS (3) Information requirements of the typical business organization: Data base design, analysis, and implementation. Prerequisite: Senior standing, core Computer Science Requirement.

MNGT 438 MULTINATIONAL MANAGEMENT AND STRATEGIES (3) Global strategy, management and organization of multinational corporations. Organization development, strategy and interaction of host country policies and multinational operations. Prerequisite: Senior standing, MNGT 361. (UG) (Not open to students who have taken 0506.437 or 0513.437 or INBU.437.)

MNGT 455 SMALL BUSINESS DEVELOPMENT (3) The research and planning process needed to start a small business is emphasized. Entrepreneurial management strategies for marketing, finance, and operations are studied. The preparation of a business plan is required. (UG) Prerequisites: Senior standing, FIN.331, MKTG.341, MNGT.365. (Not open to students who have taken 0506.455.)

MNGT 463 ORGANIZATIONAL LEADERSHIP (3) Students experience various ways of thinking about and responding to the concept and processes of leadership and leadership behavior related to the management of human organizations. Prerequisites: Senior standing, MNGT.361. (UG) (Not open to those who completed 0506.463 or 0597.463 or Seminar in Leadership.)

MNGT 465 ORGANIZATION DEVELOPMENT (3) Theories and methods used to facilitate change in the organization. Emphasis on the change process, change agents, and the organizational culture. Prerequisite: Senior standing, MNGT 361. (UG) (Not open to those who completed 0506.465 or 0597.465 or Organizational Development.)

MNGT 467 QUANTITATIVE METHODS FOR BUSINESS II (3) Advanced quantitative techniques for solving management problems. Utilization of the microcomputer to solve realistic business problems is emphasized. Topics include mathematical programming, queuing theory, simulation, advanced statistical models, and scheduling theory. Prerequisites: Senior standing or consent of instructor, MNGT.363. (Not open to students who have taken 0506.467.)

MNGT 470-479 SPECIAL TOPICS IN MANAGEMENT (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current management practices. Prerequisite: consent of instructor. Special permit only. (UG) (Not open to students who have taken 0506.470-479.)

MNGT 481 BUSINESS STRATEGY AND POLICY (3) A capstone course emphasizing managerial decision making as it relates to strategic management and business policy, and integrating operational skills and theories. Prerequisites: Special permit, Senior standing, Completion of all 200 and 300 level BUAD core Courses. (UG) (Not open to students who have taken 0506.481 or 0597.481 or Business Policy.)

MNGT 482 BUSINESS ENVIRONMENT AND PUBLIC POLICY (3) An integrated systems view of the interrelationships between business organizations and their environments. Topics include analysis of managerial role within post-industrial societal framework, basic structural elements of society that relate to management tasks, social responsibility functions of business including values, ethics and beliefs underlying managerial decisions. Prerequisites: Senior standing, MNGT.361. (UG) (Not open to those who completed 0506.482 or 0597.482.)

MNGT 491 DIRECTED READINGS (Management) (1-3) Readings in selected functional or conceptual areas of business or management. Prerequisite: Senior standing, special permit. (UG). (Not open to students who have taken 0506.491.)

MNGT 495 INDEPENDENT RESEARCH (Management) (1-3) Directed research on specific problems in a functional area of management. May be re-elected for a maximum total of 6 credits. Prerequisite: Junior standing, completion of all 200 and 300 level BUAD core courses, Special permit requirements. (UG) (Not open to students who have taken 0506.495.)

MNGT 497 PRACTICUM: Management (3) Students are required to work in assigned projects in actual business environments. Priority will be given to seniors. Graded under S/U procedure. May be re-elected for a maximum total of 6 credits. NOTE: A cumulative grade point average of at least 2.50 is required. Prerequisite: Consent of instructor. Special Permit. [Co-op Fee Required] (UG) (Not open to students who have taken 0506.497.)

Graduate Division

See TSU Graduate School Catalog for course descriptions.

MNGT 601 ADMINISTRATIVE THEORY AND PRACTICE (3)

MNGT 670-679 SPECIAL TOPICS IN MANAGEMENT (3)

MNGT 695 INDEPENDENT STUDY IN MANAGEMENT (3)

MARKETING (MKTG)

Upper Division

MKTG 341 [540] PRINCIPLES OF MARKETING (3) Marketing problems of business firms. Influence of the marketplace, the industry

structure, and the role of government. Prerequisite: junior/major standing, ECON 201, 202; MATH 231; ACCT 201, 202. (UG & G) (Not open to students who have taken 0506.341.)

MKTG 343 PHYSICAL DISTRIBUTION MANAGEMENT (3) Transportation, packaging, materials handling, warehouse location. A systems approach is employed emphasizing the trade-offs between the various functions. Prerequisite: MKTG 341. (UG) (Not open to students who have taken 0506.343.)

MKTG 345 ADVERTISING MANAGEMENT (3) Promotional strategies for different classifications of products and services. Planning, preparing and scheduling advertisements. Media selection and determination of effectiveness. Advertising research. Prerequisite: MKTG 341. (UG) (Not open to students who have taken 0506.345.)

MKTG 351 SALES MANAGEMENT (3) Sales organization and the management of the selling function within the organizational structure. Prerequisite: MKTG 341 or consent of instructor. (UG) (Not open to students who have taken 0506.351.)

MKTG 371 PRINCIPLES OF TRANSPORTATION (3) Economic and political factors affecting transportation and transportation systems. Development problems and government regulations. Study of freight and passenger carrier modes. Prerequisite: junior/major standing or consent of instructor. (UG) (Not open to students who have taken 0506.371.)

MKTG 419 TRAFFIC MANAGEMENT (3) Managerial skills required to successfully control a company's in-bound and out-bound transportation. Prerequisite: MKTG 371. (UG) (Not open to students who have taken 0506.419.)

MKTG 431 ADVANCED MARKETING MANAGEMENT (3) Competitive activities, the preparation of forecasts and projections, and the development and execution of comprehensive marketing programs. Prerequisite: MKTG 441. (UG) (Not open to students who have taken 0506.431.)

MKTG 441 [541] MARKETING RESEARCH AND FORECASTING (3) Marketing research as a tool facilitating the corporate decision-making process from sales research, market analysis through motivational analysis, advertising policy and product and package design. Research design, sampling theory, data collection, interview techniques and statistical analysis. Prerequisites: MKTG 341 and MATH.231. (UG & G) (Not open to students who have taken 0506.441.)

MKTG 442 [542] SEMINAR IN MARKETING (3) Development of decision-making skills and the formulation of strategies and policy. Market segmentation, consumer behavior, pricing, product line strategy, and promotion. Prerequisites: MKTG 341; MATH 231 or ECON 301. (UG & G) (Not open to students who have taken 0506.442.)

MKTG 443 INDUSTRIAL MARKETING (3) Specific requirements for successful marketing of industrial products, as opposed to consumer goods, are discussed in detail. Significant aspects of marketing functions will be investigated in the light of the need of the industrial user. Prerequisite: MKTG 341. (UG) (Not open to students who have taken 0506.443.)

MKTG 445 INTERNATIONAL MARKETING (3) Environment of international marketing including channels of distribution, advertising, and legal, economic and cultural factors. Problems and obstacles related to market surveys and development of policies. Regional studies. Prerequisites: MKTG 341.

MKTG 470-479 SPECIAL TOPICS IN MARKETING (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current management practices. Prerequisite: consent of instructor. Special permit only. (UG) (Not open to students who have taken 0506.470-479.)

MKTG 491 DIRECTED READINGS (Marketing) (1-3) Readings in selected functional or conceptual areas of marketing. Prerequisite: Consent of instructor. Special Permit. (UG) (Not open to students who have taken 0506.491.)

MKTG 495 INDEPENDENT RESEARCH (Marketing) (1-3) Directed research on specific problems in a functional area of marketing. May be re-elected for a maximum total of 6 credits. Prerequisite:

Consent of instructor. Special Permit. (UG) (Not open to students who have taken 0506.495.)

MKTG 497 PRACTICUM: Marketing (3) Students are required to work in assigned projects in actual business environments. Priority will be given to seniors. Graded under S/U procedure. May be re-elected for a maximum total of 6 credits. Prerequisite: Consent of instructor. Special Permit. [Co-op Fee Required] (UG) (Not open to students who have taken 0506.497.)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

MKTG 603 MARKETING ADMINISTRATION

MKTG 670-679 SPECIAL TOPICS IN MARKETING (3)

MKTG 695 INDEPENDENT STUDY IN MARKETING (3)

MASS COMMUNICATION

Lower Division

MCOM 151 INTRODUCTION TO JOURNALISM (3) General survey of journalism to include print and broadcast media. Study of the personnel, tasks and institutions of the profession. Consideration of the historical development of journalism, legal concerns and ethical standards. Prerequisite: ENGL.102. (UG)

MCOM 201 INTRODUCTION TO BROADCASTING (3) An introduction to the concepts of the role of history, science, politics, and economics in the development and present status of broadcasting. (UG)

MCOM 202 INTRODUCTION TO FILM (3) An introduction to motion picture communication, technology, and terminology with film analysis and filmmaking projects. (UG)

MCOM 205 IMAGES OF WOMEN IN FILM (3) Examination of the treatment of women in film from the silent movies to the present. Exploration of how these images reflect and affect the social role/status of women during the period. Emphasis on American film. (UG)

MCOM 211 COMMUNICATION PROCESS (3) Survey of prominent theories in human communication and mass media. Emphasis upon communication effects. (UG)

MCOM 213 LISTENING (3) Course is designed to discuss, exemplify, and practice listening skills. Intensive study of individual listening ability with emphases placed upon awareness and improvement. (UG)

MCOM 214 PRINCIPLES OF ADVERTISING (3) Review of the contribution made by advertising to the United States economy, and of the principles and practices as applied to electronic and printed media. (UG)

MCOM 265 RADIO PRODUCTION I (3) A course structured to introduce the student to the equipment and performance techniques necessary to produce a variety of radio show formats. The student will be required to participate on the campus radio station. Prerequisites: MCOM 201, 1506.131. (UG)

MCOM 267 FILMMAKING I (3) An introduction to the techniques and theories of motion picture production. Students design, film, and edit their own projects. Prerequisites: MCOM 202 and consent of instructor. (UG)

MCOM 271 TELEVISION PRODUCTION I (3) An introduction to the basic principles, procedures, and techniques of television production. Students will be required to participate on the college television production crew. (Not open to students who have had MCOM 261, Basic TV Techniques.) (UG)

Upper Division

MCOM 315 BUSINESS AND PROFESSIONAL COMMUNICATION (3) The examination of curriculum vitae preparation, dyadic encounters (particularly the interview) and the exploration of communication in various business structures. Agenda, briefings,

- meetings, conferences, and strategies of attributional and communicative techniques employed in professional settings. Prerequisite: SPCH.131 or equivalent. (UG)
- MCOM 351 [550] PUBLIC OPINION AND THE PRESS (3)** Journalistic aspects of public opinion and propaganda; the impact of mass communication media on the formation of public opinion. Techniques of polling and testing public opinion. (UG & G)
- MCOM 352 MEDIA CRITICISM** Theory and practice of media criticism intended for various audiences, including consumer oriented criticism, social criticism, and scholarly criticism. Prerequisites: MCOM 151, or MCOM 201, or MCOM 202, or permission of instructor.
- MCOM 353 PUBLICITY AND PUBLIC RELATIONS (3)** Provides an awareness and understanding of public relations activities. Students learn publicity techniques and how to organize campaigns. (UG)
- MCOM 355 NEWSWRITING (3)** Introduction to newswriting from the standpoint of style, structure and readability. Prerequisites: MCOM 151 one English Composition course, and *efficient typing skill*. (UG)
- MCOM 356 FEATURE WRITING (3)** Preparation of long and short articles, editorials and news features. Prerequisites: MCOM 355, one English Composition course, and *efficient typing skill*. Fulfills advanced writing requirement. (UG)
- MCOM 358 NEWS EDITING (3)** Practice in editing, headline writing, page make-up and use of pictures and type in newspapers, and editing copy for use on radio and television. Prerequisite: MCOM.355. (UG)
- MCOM 359 MAGAZINE PUBLISHING (3)** Examination of the principle practices, problems, and trends in magazine publishing through tracing process of a magazine from copy to bindery. Steps in periodical production stressing emphasis on layout factors. Intensive analysis of magazine markets and case studies of magazine publishing problems. Prerequisites: MCOM 151, MCOM 355. (UG)
- MCOM 361 DOCUMENTARY FILM AND VIDEOTAPE (3)** History, theory and practical use of documentary approaches to film and videotape. Production of film and videotape projects required. Prerequisites: MCOM 201, 202, and/or consent of instructor. (UG)
- MCOM 363 HISTORY OF FILM (3)** Exploration of the social, artistic, economic, and technical factors in the development of the motion picture from 1900 to the present. Prerequisite: MCOM 202. Fulfills advanced writing course requirement. (UG)
- MCOM 364 AESTHETICS OF THE FILM (3)** Survey of film theory and aesthetics of silent, sound and avant-garde motion pictures. Prerequisite: MCOM 363 or consent of instructor. (UG)
- MCOM 365 RADIO PRODUCTION II (3)** The process of commercial and studio recording for radio broadcast will be studied through an examination of the principles of tape recording and editing. The student will participate in commercial and studio recording projects. Prerequisites: MCOM 201, MCOM 265. (UG)
- MCOM 367 FILMMAKING II (3)** Exploration of advanced techniques in 16mm filmmaking, involving treatment and script preparation, directing, cinematography, sound recording, editing and post production. Prerequisites: MCOM 267, MCOM 202. (UG)
- MCOM 371 TELEVISION PRODUCTION II (3)** Advanced techniques in television production for commercial and educational television. Major emphasis on directing and producing. Prerequisite: MCOM 271 or consent of instructor. (UG)
- MCOM 375 BROADCAST PERFORMANCE (3)** The process of communication through broadcast performance will be studied. The principles of broadcast communication will be applied to such functions as television and radio news announcing, commercial announcing, sports announcing, and music announcing. Laboratory experiences provided. Prerequisites: MCOM 201, MCOM 265. (UG)
- MCOM 377 BROADCAST/FILM WRITING (3)** Training and practice in writing non-fiction, fiction and commercial/PSA scripts for the broadcast media and film. Prerequisites: MCOM 267 or MCOM 271. (UG) (Not open to students who have taken MCOM 373.)
- MCOM 381 BROADCAST JOURNALISM (3)** Theory and practice of broadcast journalism. The gathering, writing and presentation of news for audio-only and audio-visual media. Ethical standards for broadcast journalism will be analyzed. Prerequisites: MCOM 201, MCOM 355. (UG)
- MCOM 383 NEWS REPORTING (3)** Introduction to and experience in reporting. Coverage of specific news beats on and off campus and general assignment work. Consideration of news-gathering techniques, including: direct and participant observation, use of survey research data and use of official records. Prerequisite: MCOM 355. (UG)
- MCOM.385 MASS MEDIA IN MODERN SOCIETY (3)** Seminar in mass media, concentrating on audience, content and effects of the media. Prerequisites: MCOM.151, MCOM.201. (UG)
- MCOM.391 PHOTOJOURNALISM (3)** Photography for the mass media. Consideration of the history, aesthetics and ethics of photojournalism. Prerequisites: MCOM.355; and PHSC.234 or ART.234 or consent of instructor. (UG)
- MCOM.421 [521] FINANCIAL COMMUNICATIONS (3)** Develops understanding of business financial fundamentals and techniques for communicating with the financial community including news announcements, annual and quarterly reports, and legal requirements. Prerequisite: One course in Accounting & Finance or Journalism, or consent of instructor. (UG & G)
- MCOM.451 [551] PUBLIC RELATIONS FOR NON-PROFIT ORGANIZATIONS (3)** A study of public relations in the non-profit organization. Fundraising, lobbying, working with volunteers, media relations, and the overall PR program will be studied. Course combines theory and practice. Contacts made with community non-profit organizations are the basis for practical experience lab sessions. Prerequisite: MCOM.353. (UG & G)
- MCOM.453 [553] ADVANCED PUBLICITY AND PUBLIC RELATIONS (3)** Case studies and typical public relations problems in industry, labor, education, government, social welfare, and trade associations. Planning and preparation of communications materials for various media; application of public relations techniques. Prerequisites: MCOM.353 and/or MCOM.497. (UG & G)
- MCOM.455 DIRECTING FOR FILM (3)** Examination of the fundamentals of screen directing which includes script breakdown, scene blocking, communication with cast and crew and the logistics of production. Prerequisite: MCOM.267 or MCOM.271. (UG)
- MCOM.460-469 [560-569] PRACTICUM IN MASS COMMUNICATION (1-6)** Provides students with valuable practical field experiences. Under faculty supervision the student works in an actual job setting with a working professional in a particular area of mass communications. Prerequisites: Completion of appropriate courses determined by the department. Please check with the department for specifics. (S/U grading only) (UG & G)
- MCOM.471 TELEVISION PRODUCTION III (3)** Exploration of fiscal, managerial, technical and creative responsibilities of the producer and aesthetic, interpretive, stylistic concerns of the director. Prerequisite: MCOM.371. (UG)
- MCOM.475 [575] FILM WORKSHOP (3)** Designed primarily to provide experienced or future teachers with background about film so that they may better help pupils to become informed about and to develop critical reactions to the films they view. Prerequisite: Consent of instructor. (UG & G)
- MCOM.491 [591] INDEPENDENT STUDY IN FILM (1-6)** Independent work in film production and research. Production students may work independently, with campus production unit or with professional production company. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisites: MCOM.202, MCOM.267 or consent of instructor. (UG & G)
- MCOM.493 [593] INDEPENDENT STUDY IN RADIO (1-6)** Independent study in selected areas of radio through directed readings, projects in conjunction with the operation of the student radio station or work with a full-time professional in the com-

munity. Selected students may work as laboratory assistants in the MCOM.265 Radio Production I class. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisites: MCOM.201, MCOM.265 and consent of instructor. (UG & G)

MCOM 495 [595] INDEPENDENT STUDY IN TELEVISION (1-6)

Independent study in selected areas of television production and research through selected readings, projects, papers and seminars. May be repeated for a maximum of six credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisites: MCOM 371 and consent of instructor. (UG & G)

MCOM 496 [596] INDEPENDENT STUDY IN JOURNALISM (1-6)

Independent study in the varied aspects of newspaper writing. Opportunity will be provided to work under the guidance of professional newspaperpersons connected with the Baltimore papers. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisite: Open by invitation of the department to qualified students. (UG & G)

MCOM 497 [597] INDEPENDENT STUDY IN PUBLIC RELATIONS (1-6)

Independent study in selected areas of public relations through directed readings, projects, papers or seminars. When possible opportunity will be provided for the student to work outside the classroom, under the cooperative guidance of his/her instructor and a full-time professional public relations person in the field of the student's choice. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisites: MCOM 353 and consent of instructor. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

MCOM 601 MEDIA WRITING (3)

MCOM 603 CRITICISM IN MASS MEDIA (3)

MCOM 615 ADMINISTRATIVE AND PROFESSIONAL COMMUNICOLOGY (3)

MCOM 617 INTERNATIONAL COMMUNICATION (3)

MCOM 621 MASS MEDIA LAW AND REGULATIONS (3)

MCOM 651 MEDIA AND POLITICS (3)

MCOM 670-679 SPECIAL TOPICS IN MASS COMMUNICATION (3)

MCOM 680 SEMINAR IN MEDIA MANAGEMENT: BROADCAST STATION MANAGEMENT AND OPERATIONS (3)

MCOM 685 SEMINAR IN MEDIA PRODUCTION: PUBLIC RELATIONS (3)

MCOM 686 SEMINAR IN MEDIA PRODUCTION: TELEVISION (3)

MCOM 687 SEMINAR IN MEDIA PRODUCTION: NEWS-PAPERS (3)

MCOM 688 SEMINAR IN MEDIA PRODUCTION: FILM (3)

MCOM 695 DIRECTED READINGS IN MASS COMMUNICATION (3)

MCOM 701 MEDIA INTERRELATIONSHIPS (3)

MCOM 711 THEORIES IN MASS COMMUNICATION (3)

MCOM 721 RESEARCH METHODS IN MASS COMMUNICATION (3)

MCOM 781 INTERNSHIP IN JOURNALISM (3)

MCOM 783 INTERNSHIP IN PUBLIC RELATIONS (3)

MCOM 785 INTERNSHIP IN FILM (3)

MCOM 787 INTERNSHIP IN TELEVISION (3)

MCOM 789 INTERNSHIP IN RADIO (3)

MCOM 795 INDEPENDENT STUDY IN MASS COMMUNICATION (3)

MCOM 897 GRADUATE PROJECT IN MASS COMMUNICATION (3)

MCOM 898 THESIS (3 or 6)

MCOM 899 THESIS CONTINUUM (1)

MATHEMATICS (MATH)

Lower Division

MATH 101 ELEMENTS OF MATHEMATICS (3) Topics selected from systems of numeration, logic, sets, algebraic properties of real numbers, abstract algebraic structures, probability, and geometry. Prerequisite: One year of high school algebra. (Not open to mathematics majors, mathematics minors, early childhood education or elementary education students or any students who have received credit for any college level mathematics course.) (UG)

MATH 111 ALGEBRA FOR APPLICATIONS (3) Applications of finite mathematics: linear equations, matrices, linear programming using graphical methods and the simplex algorithms, sets and counting, elementary probability. Intended primarily for students in business, economics, psychology and the social sciences. Prerequisite: Two years of algebra or DVMT 110. (Not open to students who have completed MATH.115 or MATH.119.) (UG)

MATH 115 BASIC MATHEMATICS FOR THE SCIENCES (3) Intended primarily for students in biology, natural sciences, environmental studies, health record administration, medical technology, and nursing. Functions and equations; linear, quadratic, exponential, trigonometric. Variation. Vectors. Applications of concepts and skills to the life and physical sciences are stressed. Not open to students who have completed MATH 119. Prerequisite: One year plane geometry, two years algebra, or DVMT 110. (UG)

MATH 116 MATHEMATICS II (3) Complex numbers; determinants; and analytic geometry of the line, plane, conics, and three-space surfaces. Prerequisite: MATH 115 or two years high school algebra and one-half year trigonometry. (UG)

MATH 119 PRE-CALCULUS (4) The concept of function, exponential, logarithmic, circular and trigonometric functions, systems of linear equations, vectors in two space, lines, conic sections and polar coordinates. Prerequisites: Two years algebra, one year plane geometry, 1/2 year trigonometry. (UG)

MATH 204 CONCEPTS OF MATHEMATICS FOR ELEMENTARY TEACHERS I (3) Logic, sets, systems of numeration, abstract systems, elements of number theory, and the development of the number system through the real numbers. Prerequisite: One year of high school algebra. (Required of all early childhood education and elementary education students. Satisfies mathematics requirement for these students. Not open to others.) (UG)

MATH 205 CONCEPTS OF MATHEMATICS FOR ELEMENTARY TEACHERS II (3) Elements of algebra, metric and nonmetric geometry, probability, statistics, measurement. Prerequisite: MATH 204. (This course or its equivalent is required of all early childhood education and elementary education students, except those who are also mathematics minors. Not open to others.) (UG)

MATH 211 CALCULUS FOR APPLICATIONS (3) Intended primarily for students in biology, business, economics, psychology and the social sciences. Elements of differential and integral calculus from an intuitive standpoint with emphasis on the use of calculus in the above fields. Exponential and logarithmic functions; partial derivatives included. Prerequisites: MATH 111 or MATH 115 or MATH 116 or MATH 119. (Not open to mathematics majors or minors.) (UG)

MATH 231 BASIC STATISTICS I (3) Frequency distributions with emphasis on binomial and normal distributions, percentiles, measures of central tendency and variability, sampling theory, tests of hypotheses, regression analysis, correlations, and analysis of variance or time series. Emphasis will be placed on practical applications of statistics. Prerequisite: MATH 111 or MATH 115 or equivalent. (Not open to mathematics majors.) (UG)

MATH 232 BASIC STATISTICS II (3) Continuation of time series analysis, analysis of variance, decision theory and non-parametric techniques. Emphasis will be placed upon practical applications. Prerequisite: MATH 231 or equivalent. (No credit toward a mathematics major.) (UG)

MATH 237 ELEMENTARY BIOSTATISTICS (4) Elementary statistical concepts and their application to the biological and health sciences. Descriptive statistics, estimation techniques, hypothesis testing, demography and vital statistics. Prerequisite: Two years high school algebra or DVMT 110. Not open to those who have completed MATH 231 or MATH 331. Not open to mathematics majors. (UG)

MATH 263 DISCRETE MATHEMATICS I (3) Sets, logic, induction, functions, relations, sequences, recursion, combinatorics, graphs and trees, matrices with an emphasis on applications in computer science. Prerequisite: Four years of high school mathematics or MATH 119. (Not open to those who have completed MATH 261.) (UG)

MATH 264 DISCRETE MATHEMATICS II (3) Graphs and graph algorithms, trees and networks, lattices and Boolean algebra, linear equations, linear transformations and matrices, linear programming. Prerequisite: MATH 261 or MATH 263 (Not open to those who have completed MATH 365.) (UG)

MATH 273 CALCULUS I (4) Functions, limits and continuity; differentiation of algebraic and trigonometric functions; mean value theorem; differentials; introduction to integration; applications. Prerequisite: MATH 116 or MATH 119 or calculus course in high school or adequate score on Placement Test. (UG)

MATH 274 CALCULUS II (4) Differentiation and integration of exponential, logarithmic, and inverse trigonometric functions; techniques of integration and applications; indeterminate forms; improper integrals; sequences and series of numbers; power series. Prerequisite: MATH 273. (UG)

MATH 293 HONORS SEMINAR IN MATHEMATICS (3) A problem solving seminar designed for students who have shown talent in mathematics but have not yet been exposed to advanced mathematics courses. Techniques of problem solving and the solution of challenging problems involving elementary mathematics such as probability, number theory, graph theory and counting. It is expected that qualified students will usually take this course during their freshman or sophomore year. Honors College Course. Prerequisite: Special permit only by Departmental Honors Committee. (Offered only in the Spring Semester.) (UG)

Upper Division

MATH 321 TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (3) Materials of instruction and methods of presentation with emphasis on the discovery approach. Prerequisites: MATH 204 and MATH 205. (No credit toward a mathematics major or minor.) (UG)

MATH 323 TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (3) Nature of instruction, organization of units of instruction, provisions for developing understandings, new programs and research findings, and techniques of evaluation. Required of all elementary education majors. Prerequisites: MATH 204 and MATH 205. (No credit toward a mathematics major or minor.) (UG)

MATH 325 TEACHING MATHEMATICS IN THE MIDDLE SCHOOL (3) Philosophy, learning, teaching models, specific methods or approaches, planning for teaching and learning, and applicable contemporary curricula in the middle school mathematics curriculum. Prerequisites: MATH 261 or MATH 263 and MATH 273 and consent of instructor. (No credit toward a mathematics major or minor.) (UG)

MATH 330 INTRODUCTION TO STATISTICAL METHODS (4) An introductory course for students with mathematics and computing background emphasizing statistical ideas and techniques. Descriptive statistics, probability, estimation and sampling, hypothesis testing, regression and correlation, and analysis of variance will be discussed with many opportunities for students to

use preprogrammed statistical packages such as SPSS or BMD on large data bases. Prerequisites: MATH 274 (or concurrently) and COSC 306 (or COSC 236). (UG)

MATH 331 [531] PROBABILITY (3) Probability in sample spaces, discrete and continuous random variables, distribution theory, Tchebyshev's theorem, central limit theorem, expected values and moments. Prerequisite: MATH 274. (UG & G)

MATH 332 [532] MATHEMATICAL STATISTICS (3) Sample theory and distributions, point estimation, confidence intervals, tests of hypothesis, regression, correlation and analysis of variance. Prerequisite: MATH 331. (Offered only in the spring semester.) (UG & G)

MATH 351 ELEMENTS OF GEOMETRY (3) Designed to give the elementary education student additional background in geometry. Involves geometric definitions, vocabulary and techniques, constructions and scale drawings, and measurement of plane and space figures. Prerequisite: MATH 205 or equivalent. (Not open to mathematics majors.) (UG)

MATH 353 ELEMENTARY GEOMETRY FROM AN ADVANCED STANDPOINT (3) Review of synthetic Euclidian geometry; nonEuclidian geometries; finite geometries and systems of axioms; classical theorems; elementary transformations. Prerequisites: MATH 261 or MATH 263 and MATH 273. (Offered only in spring semester.) (UG)

MATH 357 COLLEGE GEOMETRY (3) Projective geometry, both synthetic and analytic, including duality; Desargues theorem, harmonic sequences, Pappus theorem, homogeneous coordinates, conics, polarities. Prerequisites: MATH 261 or MATH 263 and MATH 273. (Offered only in the fall semester.) (UG & G)

MATH 361 [560] ALGEBRAIC STRUCTURES (4) Groups, rings, fields, integral domains, and polynomial rings. Prerequisite: MATH 261 or MATH 263. (UG & G)

MATH 365 [565] LINEAR ALGEBRA (3) Abstract vector spaces, and their principal properties; the vector space of linear transformations and the algebra of matrices; determinants; similarity; eigenvectors and eigenvalues; inner product spaces and orthogonal (unitary) similarity; canonical forms under row equivalence and similarity. Application to systems of equations. Prerequisite: MATH 261 or MATH 263. (UG & G)

MATH 367 [567] THEORY OF NUMBERS (3) Theory of prime numbers, the division algorithm, the fundamental theorem of arithmetic, polynomials, congruences, number theoretic functions. Prerequisite: MATH 261 or MATH 263. (Offered only in the fall semester.) (UG & G)

MATH 373 [573] CALCULUS III (4) Differential and integral calculus of functions of several variables; differential and integral calculus of vector valued functions, including the divergence and Stoke's theorems. Prerequisite: MATH 274. (UG & G)

MATH 374 [574] DIFFERENTIAL EQUATIONS (3) Theory and application of linear ordinary differential equations. Solutions of nonlinear ordinary differential equations of the first order. Prerequisite: MATH 274. (UG&G)

MATH 377 [575] MATHEMATICAL MODELS (3) Consideration of mathematical problems in sociology, psychology, economics, management science and ecology, and developing appropriate mathematical models and techniques to solve them. Prerequisites: MATH 274 and COSC 235 and either MATH 365 or MATH 264, at least Junior standing or consent of instructor. (Offered only in the fall semester.) (UG & G)

MATH 390 INTRODUCTION TO ACTUARIAL MATHEMATICS (1) Introduction to the field of actuarial mathematics designed to provide guidance in preparation for the Society of Actuaries Part I examination. Involves lectures by outside experts in the actuarial field. Prerequisite: MATH 373. (UG)

MATH 421 [521] APPLICATIONS OF MATHEMATICS FOR SECONDARY SCHOOL TEACHERS (3) The course examines a series of applications of mathematics that may be used to enrich the secondary mathematics curriculum. (No credit towards a mathematics major.) Prerequisite: Teaching experience in mathematics or science or consent of instructor. (UG & G)

MATH 422 SEMINAR IN MATHEMATICS EDUCATION FOR ELEMENTARY SCHOOL TEACHERS (3) Analysis of topics, techniques, programs and materials used in the teaching and learning of mathematics in the elementary schools. (Credit may be applied to the elementary education mathematics minor program but not to other mathematics major/minor programs.) Prerequisite: MATH.321 or MATH 323. (UG)

MATH 423 TEACHING MATHEMATICS IN THE SECONDARY SCHOOL (3) Objectives of mathematics instruction, examination of courses of study and textbooks, study of methods of teaching. Open only to students in the student teaching block. Prerequisites: MATH 353 and MATH 361 or consent of instructor. (This course shall be offered only in the spring semester to be followed by SCED 398 Student Teaching in the Secondary Schools during the fall. No credit toward a mathematics major for arts and science students.) (UG)

MATH 425 [525] METHODS AND MATERIALS FOR MATH LAB INSTRUCTION (1-3) Examination of and experiences with commercial and teacher-made materials designed for a laboratory (activity centered) approach to learning mathematics. Prerequisite: A methods course in teaching mathematics (MATH 321, 323, 423) or previous teaching experience. (UG & G)

MATH 427 [527] READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3) Directed study for the teacher of elementary school mathematics. Prerequisites: MATH 321 or MATH 323 and approval of instructor. (No credit toward a mathematics major.) (UG & G)

MATH 429 [529] READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (1-3) Directed study for the teacher of secondary school mathematics. Prerequisite: Consent of instructor. (No credit toward a mathematics major for arts and science students.) (UG & G)

MATH 435 [535] NUMERICAL ANALYSIS I (3) Error analysis, interpolation, numerical differentiation and integration, numerical solution of algebraic equations and of systems of algebraic equations. Prerequisites: COSC 236 (or COSC 306) and MATH 274 and MATH 365 (or MATH 264). (UG & G)

MATH 436 [536] NUMERICAL ANALYSIS II (3) Numerical solution of differential equations. Least squares and its applications, linear programming and extension of the concepts of MATH 435. Prerequisite: MATH 435. (Offered only in the spring semester.) (UG & G)

MATH 437 [537] OPERATIONS RESEARCH (4) Introduction to linear and integer programming; the simplex method and duality theory; dynamical formulation of deterministic decision process problems, applications to problems of equipment replacement, resource allocation and scheduling; Poisson and birth and death processes. Markovian queues. Prerequisites: MATH 331 and MATH 365. (Offered only in the spring semester.) (UG & G)

MATH 451 [551] GRAPH THEORY (3) Hamiltonian and Eulerian graphs, coloring graphs, planar and non-planar graphs, connectivity problems, isomorphic graphs and advanced topics. Prerequisite: MATH.263. (UG & G)

MATH 457 [557] DIFFERENTIAL GEOMETRY (3) Curvatures of curves and surfaces in E^3 , geodesics, invariants, mappings and special surfaces. Prerequisite: MATH 373. (UG & G)

MATH 461 [561] ADVANCED TOPICS IN ALGEBRA (3) Extension of the concepts of MATH 361. Prerequisites: MATH 361 and MATH 365. (Offered only in the fall semester.) (UG & G)

MATH 473 [576] INTRODUCTORY REAL ANALYSIS (4) An introduction to mathematical analysis. Sequences, series, continuity, differentiation, integration and uniform convergence. Prerequisites: MATH 361 or MATH 365 and MATH 274. (UG & G)

MATH 475 [577] COMPLEX ANALYSIS (3) Complex number system, analytic functions, Cauchy's integral theorem and integral formula, Taylor and Laurent series, isolated singularities, Cauchy's residue theorem and conformal mappings. Prerequisite: MATH 373. (Offered only in the fall semester.) (UG & G)

MATH 477 [578] TOPOLOGY (3) Basic concepts of pointset topology, separation axioms, compact and connected spaces, product and quotient spaces, convergence, continuity and homeomorphisms. Prerequisites: MATH 361 or MATH 365 and MATH 373. (Offered only in the spring semester.) (UG & G)

MATH 480-489 [580-589] SELECTED TOPICS IN MATHEMATICS AND STATISTICS (1-4) Topics will be chosen from different areas in mathematics and statistics. Content will be determined so as to complement course offerings as well as the needs and desires of the students. MATH 480 through MATH 483 may not be counted towards a mathematics major. Students may not accumulate more than 9 credit hours in Selected Topics. Prerequisites will vary from topic to topic. (UG & G)

MATH 491 [591] READINGS IN MATHEMATICS (1-3) Independent reading in selected areas of mathematics. Prerequisite: Consent of instructor. May be repeated for a maximum of 6 credits. (Open only to seniors.) (UG & G)

MATH 493 DIRECT READINGS IN MATHEMATICS (HONORS) (3) Individual reading and background research under direction of a faculty member in preparation for writing an honors thesis. (To be restricted to students in the departmental honors program.) Prerequisite: Admission to department honors program. (UG)

MATH 495-496 APPLIED MATHEMATICS LABORATORY I, II (3, 3) Investigation by a team of students under faculty direction of a problem of mathematical and/or computational nature, chosen from proposals submitted by clients in the university or local industry. Team involvement may include literature searches, model definition, collection and analysis of data and model verification. Restricted to invited students. Prerequisites: Nine (9) hours of mathematics and/or computer science, at least junior standing, and consent of instructor. (UG)

MATH 499 HONORS THESIS IN MATHEMATICS (3-6) Writing of an honor thesis based on individual research. May be repeated for a maximum of 6 credits. (Open only to advanced honors candidates.) Prerequisite: Permission of Department Honors Committee. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

MATH 601 HISTORY OF MATHEMATICS (3)

MATH 621 SEMINAR IN TEACHING ARITHMETIC (3)

MATH 625 SEMINAR IN MATHEMATICS EDUCATION FOR SECONDARY SCHOOL TEACHERS (3)

MATH 630 STATISTICS—AN INTEGRATED APPROACH (4)

MATH 631 TOPICS IN PROBABILITY (3)

MATH 653 TOPICS IN GEOMETRY (3)

MATH 661 ELEMENTS OF GALOIS THEORY (3)

MATH 691 SEMINAR IN MATHEMATICAL APPLICATIONS (3)

MATH 695 INDEPENDENT STUDY IN MATHEMATICS (1-3)

MEDICAL TECHNOLOGY (MDSC)

Upper Division

MDSC 401 IMMUNOHEMATOLOGY AND BLOOD BANK LECTURE (3) Lectures deal with the theoretical aspects of blood group serology. Topics include: Human blood groups and their significance, transfusion, donor selection and blood components, antibody detection and identification, quality control in blood banking, current transfusion practices and recent advances in immunohematology. (UG)

MDSC 402 IMMUNOHEMATOLOGY AND BLOOD BANK PRACTICAL (1.5) The laboratory deals with all routine testing in a community hospital such as the operation of a blood donor service to include: donor screening, blood collection, donor care, processing and storage of blood. Operation of a transfusion service to include: proper care and use of equipment and materials, performance of a major and minor blood group determination, compatibility testing and antibody identification. (UG)

MDSC 403 CLINICAL BIOCHEMISTRY LECTURE (4) Lecture categories include analysis chemistry and physiological biochemistry. Normal and abnormal physiology, test interpretation, quality control and test development are included. (UG)

MDSC 404 CLINICAL BIOCHEMISTRY PRACTICAL (3) Laboratory rotation provides an intensive study of test procedures and practical application of lecture topics. Areas of instruction and student participation include manual chemistry, spectrophotometry, flame photometry, automatic titration, radioisotope techniques, electrophoresis, single and multichannel continuous flow systems, discrete analysis systems, and computer controlled instrumentation. (UG)

MDSC 405 HEMATOLOGY LECTURE (3) This course is an indepth study of the formation of blood cell and coagulation factors, pathogenesis and mechanisms of hematologic disorders. Topics include: Hematopoiesis, proliferative disorders, normal and abnormal hemoglobins, anemia and hemostasis. (UG)

MDSC 406 HEMATOLOGY PRACTICAL (3) Lectures and clinical practice will include an in-depth study of coagulation describing generation of thromboplastic activity in the intrinsic and extrinsic system. Analytical methodologies as well as the correlation of tests with disease states, erythropoiesis and identification of the maturation sequence as seen in the peripheral blood and bone marrow, maintenance and quality control of all the instruments such as the coulter "S" and "F." (UG)

MDSC 407 CLINICAL PATHOLOGY (1) Discussion of theoretical and practical aspects of analysis of special body fluids with emphasis on clinical pathological correlations. (UG)

MDSC 408 CLINICAL PATHOLOGY PRACTICAL (1) Laboratory experience is provided in Nuclear Medicine, the acute care laboratory and several other areas. (UG)

MDSC 409 MICROBIOLOGY LECTURE (3) Detailed study of bacteria and fungi considered pathogenic or potentially pathogenic for man with emphasis on techniques for isolation, identification, and clinical relevance. The course also includes lectures on general bacteriology and methods for: antibiotic susceptibility testing, sterilization and disinfection and for proper collection and transport of specimens. (UG)

MDSC 410 MICROBIOLOGY PRACTICAL (3) The course involves in-depth study of the different techniques and methods used in the laboratory for the isolation and identification of bacteria and fungi considered to be of human pathogenic significance. Testing for antibiotic susceptibility of bacteria, preparation of culture media, quality control, and the safety procedures used to inhibit and spread of infection are emphasized. (UG)

MDSC 411 HUMAN PARASITOLOGY LECTURE (1) Lectures deal with the most important protozoan and metazoan organisms causing human parasitosis. The lectures stress methods for laboratory identification life cycles and clinical significance. (UG)

MDSC 412 HUMAN PARASITOLOGY PRACTICAL (1) The program includes: identification of blood parasites, procedures to prepare fecal specimens for examination for intestinal parasites, and the detailed study of the microscopic differential characteristics of cysts and negative forms of protozoan parasites. The ova of nematoda, trematoda and cestoda of human parasites are also analyzed in collections of slides, mounted preparations, and actual specimens. (UG)

MDSC 413 CLINICAL IMMUNOLOGY LECTURE (2) This course includes basic immunology, the theory of immunodiagnostics and immunopathology. Areas of concentration include: the molecular and cellular biology of the immune response, principle of antigen and antibody reaction invivo and invitro hypersensitivity states. Applications to clinical diagnosis and correlation with human disease states are stressed. (UG)

MDSC 414 IMMUNODIAGNOSTICS PRACTICAL (1) Laboratory experience includes techniques used in a large community hospital to study antigens and antibodies and their reactions, as they relate to human disease states. (UG)

MDSC 415 URINALYSIS LECTURE (1) Renal anatomy and physiology relating to the formation and content of urine in health and

disease. The theoretical aspects of the chemical analysis of the urine are included. (UG)

MDSC 416 URINALYSIS PRACTICAL (1) The microscopic and chemical analysis of the urine is stressed and is correlated with normal and abnormal renal physiology. (UG)

MDSC 491 MEDICAL TECHNOLOGY DIRECTED READINGS (1-3) Independent readings in Medical Technology or related disciplines. Prerequisite: Must be enrolled in hospital internship program. (UG)

MUSIC (MUSC)

Lower Division

MUSC 101 INTRODUCTION TO MUSIC LITERATURE (3) Music literature to acquaint the student with music through class discussions and listening. (UG)

MUSC 102 MUSIC LITERATURE FOR MUSIC MAJORS (3) Introduction to techniques of listening through exercises in perception and score reading. Required of all Music Majors. Prerequisite: Music Major; MUSC 131 or concurrently. (UG)

MUSC 103 INTRODUCTION TO TWENTIETH CENTURY MUSIC (3) A study of art music composed since 1900 through class discussions and listening. (UG)

MUSC 104 MUSIC OF THE NINETEENTH CENTURY (3) Consideration of concert music composed between 1810-1900; the romantic piano piece, solo song, symphony, concerto, chamber music; emphasis is on acquiring listening skills for recognition of compositional techniques peculiar to composers and genres of the period. Intended for non-majors. Not open to students who have received credit for MUSC 203. (UG)

MUSC 105 ELEMENTS OF MUSIC THEORY (3) A survey of the materials of music in melodic, rhythmic and harmonic usage. Music notation, basic chord grammar, function and design factors in music. Some ability to read music is highly desirable. Designed for Non-Music Majors. (UG)

MUSC 107 MUSIC FUNDAMENTALS (3) The study of basic music skills and concepts for prospective kindergarten and elementary teachers. (UG)

MUSC 111-112 WIND ENSEMBLE (1, 1) Study and performance of advanced wind literature by a small band of selected instrumentalists. Audition required. May be repeated with credit. (UG)

MUSC 121 PREPARATORY MUSIC THEORY (3) Instruction in basic music reading, scales, rhythms and elementary harmony. Designed for students whose theory placement exams indicate a need for remedial work in Music Theory. May not be counted towards the Music major. (UG)

MUSC 123 HISTORY OF JAZZ (3) Survey of jazz styles from their beginnings to the present day. Involves lecture, class discussion, and listening. Designed for the Non-Music Major. (UG)

MUSC 131-132 MUSIC THEORY I AND II (2, 2) The study of harmony up to secondary dominants and modulation. Elements of counterpoint and form. Prerequisite for Theory I: Theory Placement Exam or MUSC 121. (UG)

MUSC 133-134 MUSICIANSHIP I AND II (2,2) Development of aural skills through sight singing, dictation, improvisation and keyboard applications. Correlated with Music Theory I and II. Normally taken concurrently with MUSC 131-132. Prerequisite for Musicianship I: Theory placement exam or MUSC 121. Prerequisite for Musicianship II: MUSC 133 (UG)

MUSC 139-140 GUITAR ENSEMBLE (1, 1) Study and performance of guitar ensemble music. Required of all Guitar majors. Open to all students by audition. May be repeated for credit. (UG)

MUSC 141-142 BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. Open to all students by audition. May be repeated for credit. (UG)

MUSC 145-146 PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; supplement and im-

prove the percussion student's musical training by acquainting the student with the various techniques involved in performing on the numerous percussion instruments. Required of all percussion majors. Open to all students by audition. May be repeated for credit. (UG)

MUSC 147-148 SAXOPHONE ENSEMBLE (1, 1) Study and performance of advanced saxophone ensemble music. Required of all saxophone majors. Open to all students by audition. May be repeated for credit. Prerequisites: Consent of director. (UG)

MUSC 149-150 STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students concentrating in string instruments. Open to all students by audition. May be repeated for credit. (UG)

MUSC 151-152 VOICE ENSEMBLE (1, 1) Small group study and performance of advanced choral literature. Open to all students by audition. May be repeated for credit. (UG)

MUSC 153-154 WOODWIND ENSEMBLE (1, 1) Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments. Open to all students by audition. May be repeated for credit. (UG)

MUSC 155-156 CLARINET CHOIR (1, 1) Study and performance of clarinet choir literature. Open to all students by audition. May be repeated for credit. (UG)

MUSC 157-158 JAZZ ENSEMBLE (1, 1) Study and performance of music of the jazz idiom. Open to all students by audition. May be repeated for credit. (UG)

MUSC 159-160 EARLY MUSIC ENSEMBLE (1, 1) Study and performance of Baroque, Renaissance, Medieval literature. Open to vocalists and performers of early instruments such as recorder, viol, harpsichord, sackbutt, flute, oboe, violin, cello, bassoon, guitar, vielle, lute, medieval harp, and crumhorn. Open to all students by audition. May be repeated for credit. (UG)

MUSC 161-162 CHAMBER SINGERS (1, 1) The study and performance of Choral Literature written and suitable for a small (15-20) chorus. Open to all students by audition. May be repeated for credit. (UG)

MUSC 165 MARCHING BAND (1) Performance of a variety of marching band literature as well as various styles of marching techniques. Open to all students by audition. May be repeated for credit. (UG)

MUSC 201 OPERA WORKSHOP (1) Basic techniques of stage movement and related aspects of opera production. Musical and dramatic preparation of operatic scenes and roles. Participation in operatic performances. Open to all students by audition. May be repeated for credit. (UG)

MUSC 203 OPERA ORCHESTRA (1) Study and performance of opera literature. Open to all students by audition. May be repeated for credit. Prerequisite: Audition. (UG)

MUSC 205 WOMEN IN MUSIC (3) History of women in western music; women's contributions as composers, conductors, performers, critics, and teachers, as well as their leadership in various areas of the music industry. Prerequisite: MUSC 101. (UG)

MUSC 211-212 BRASS CLASS (1, 1) Class instruction in brass instruments. (UG)

MUSC 215-216 PERCUSSION CLASS (1, 1) Class instruction in percussion instruments. (UG)

MUSC 217-218 PIANO CLASS (1, 1) Class instruction in piano playing, with one hour daily practice in preparation required. Open to beginning students and students with a minimum of piano work, by permission of the department chair. (UG)

MUSC 219 LOWER STRING CLASS (1) Class instruction in lower string instruments. (UG)

MUSC 220 UPPER STRING CLASS (1) Class instruction in upper string instruments. (UG)

MUSC 221-222 VOICE CLASS (1, 1) Class instruction in singing, with emphasis upon basic singing techniques and voice production through the use of song material. (UG)

MUSC 223 WOODWIND CLASS I (1) Class instruction in woodwind instruments. Emphasis on acquiring basic playing facility. Concepts and procedures introduced which develop teaching expertise of woodwind instruments on beginning, intermediate, and advanced proficiency levels. (UG)

MUSC 224 WOODWIND CLASS II (1) Continuation of Woodwind Class I. Provides opportunity to instruct one another in a practice-teaching setting. (UG)

MUSC 225-226 GUITAR CLASS (1, 1) Class instruction in guitar. (UG)

MUSC 229 CONDUCTING LABORATORY ENSEMBLE (0.5, 0.5) Ensemble for students studying conducting. Provides performing experience for students on secondary instruments. Instrumental music education majors required to take one semester. Graded under S/U procedure. (UG)

MUSC 231-232 MUSIC THEORY III AND IV (2, 2) The study of chromatic harmony and various modern practices including modality, extended tonality and serial techniques. Elementary counterpoint. Binary and ternary forms. Variation principle. Prerequisite for Theory III: MUSC 132. Prerequisite for Theory IV: MUSC 231. (UG)

MUSC 233-234 MUSICIANSHIP III & IV (2, 2) Development of aural skills through sight singing, dictation, improvisation and keyboard applications. Correlated with Music Theory III & IV. Normally taken concurrently with MUSC 231-232. Prerequisite for Musicianship III: MUSC 134. Prerequisite for Musicianship IV: MUSC 233. (UG)

MUSC 235 KEYBOARD HARMONY (1) Keyboard application of theoretical techniques with emphasis on chordal harmonization, and transposition of melodies. Prerequisite: MUSC 218 or equivalent. (UG)

MUSC 236 PERCUSSION WORKSHOP (1) Covers performance concepts and teaching concepts on all percussion instruments; class type lessons on auxiliary percussion; learning to maintain and repair mallets and instruments; learning to "custom make" beaters, holders, etc.; learning to write for percussion; rehearsing and conducting percussion solo and ensemble literature. Prerequisite: Open only to percussion majors in Music. (UG)

MUSC 243 RECORDER CLASS (1) Studying and performing works written particularly for the recorder. This course cannot be used towards fulfillment of the University's General Education Requirements. Prerequisite: Ability to read music. (UG)

MUSC 245 DICTION FOR SINGERS I (ENGLISH AND ITALIAN) (2) Using the International Phonetic alphabet as a basis for pronunciation. This course is designed to introduce singers to the fundamentals of English and Italian Diction. Prerequisite: Voice major. (UG)

MUSC 246 DICTION FOR SINGERS II (FRENCH AND GERMAN) (2) Using the International Phonetic alphabet as a basis for pronunciation. This course is designed to introduce singers to the fundamentals of French and German Diction. Prerequisites: Voice major and MUSC 245. (UG)

MUSC 251 SOLO AND ENSEMBLE ACCOMPANYING (1) Practical experience under supervision in solo and ensemble accompanying. Prerequisite: One semester of piano and consent of instructor. (UG)

MUSC 257-258 PEP BAND (1, 1) Wind ensemble which performs at various college functions such as athletic events, assemblies, etc. Open to all students by audition. May be repeated for credit. (UG)

MUSC 259-260 TOWSON STATE UNIVERSITY CHORAL SOCIETY (1, 1) Study and performance of advanced choral literature. Open to all students by audition. May be repeated for credit. (UG)

MUSC 261-262 UNIVERSITY CHORALE (1, 1) Study and performance of advanced choral literature. Open to all students by audition. May be repeated for credit. (UG)

MUSC 263-264 MEN'S GLEE CLUB (1, 1) Study and performance of choral literature written and arranged for male voices. Open to all students by audition. May be repeated for credit. (UG)

MUSC 265-266 WOMEN'S CHORUS (1, 1) Study and performance of choral literature for female voices. Open to all students by audition. May be repeated for credit. (UG)

MUSC 267-268 ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition. May be repeated for credit. (UG)

MUSC 269-270 SYMPHONIC BAND (1, 1) Study and performance of advanced wind and percussion literature by a large band of selected instrumentalists. Personnel to be determined by balanced instrumentation. Open to all students by audition. May be repeated for credit. (UG)

MUSC 271 MUSICAL THEATRE ORCHESTRA (1) Study and performance of musical theater literature. May be repeated for credit. Prerequisite: Audition. (UG)

MUSC 281 RECORDING TECHNIQUES I (3) A course in recording techniques involving the history, concepts, and mechanics of the recording process. Designed to train students for the recording of live concerts, this course acquaints the student with acoustical principles, recording hardware, and recording procedures. Includes laboratory work assisting in the recording studio during concerts. Prerequisite: MUSC 101 and permission of the instructor. (UG)

MUSC 282 RECORDING TECHNIQUES II (3) This course emphasizes signal processing equipment and how it relates to live recording from the concert stage. Includes experience recording live concerts in the Fine Arts Concert Hall. Prerequisite: Recording Techniques I and permission of instructor, MUSC 281. (UG)

Upper Division

MUSC 301 HISTORY OF MUSIC I (3) Survey of the development of Music in the Western World from the period of Ancient Greece to the end of the Baroque Period. Emphasis is placed on stylistic analysis of the music. Prerequisites: MUSC 102; MUSC 231. (UG)

MUSC 302 HISTORY OF MUSIC II (3) Survey of the development of Music in the Western World from the Classical Era to the present. Emphasis is placed on stylistic analysis of music. Approved as an advanced writing course. Prerequisites: MUSC 102, MUSC 231, ENGL 102 or 190 (104). (UG)

MUSC 304 BASIC COMPOSITION (3) Elementary techniques and preparation of musical manuscript. Analysis and composition in both traditional and contemporary styles and forms. Prerequisites: MUSC 232 or equivalent. (UG)

MUSC 305 INTRODUCTION TO THE MUSIC INDUSTRY (3) Publishing, copyright law, licensing, managers and agents, arts administration, concert promotion, music merchandising, recording and selling. (UG)

MUSC 307 MARCHING BAND TECHNIQUES (0.5) Organization and administration of marching band: show design, music programming, field preparation, and rehearsal techniques. (UG)

MUSC 311 ACCOMPANYING AND SIGHT READING I (3) Study of vocal and instrumental accompanying with emphasis upon sight reading, transposition and acquaintance with vocal and instrumental literature. Prerequisite: Permission of instructor. (UG)

MUSC 312 ACCOMPANYING AND SIGHT READING II (3) Advanced study of vocal and instrumental accompanying with emphasis upon sight reading, transposition, and acquaintance with vocal and instrumental literature. Prerequisite: MUSC 311. (UG)

MUSC 321 JAZZ HISTORY (3) Survey of jazz styles from its origins to the present day. Prerequisite: MUSC 232. (UG)

MUSC 323 JAZZ THEORY (3) Study and practice of rhythmic, harmonic, and melodic dictation in jazz styles; the use of extended chords and modal harmony in the jazz idiom. Prerequisite: MUSC 232. (UG)

MUSC 325 JAZZ REPERTOIRE (3) Study and performance of standard jazz literature for small, varied instrumental groups. Prerequisite: MUSC 232. (UG)

MUSC 327 CHORAL CONDUCTING (3) Group instruction in basic conducting techniques and interpretation with relation to choral organizations. Prerequisite: MUSC 132 or permission of instructor. (UG)

MUSC 329 INSTRUMENTAL CONDUCTING (3) Group instruction in basic conducting techniques and interpretation with relation to instrumental organizations. Prerequisite: MUSC 132 or permission of instructor. (UG)

MUSC 335 CHORAL AND INSTRUMENTAL ARRANGING (3) Composition and arranging techniques for voices and/or instruments. Prerequisite: MUSC 232, equivalent, or consent of instructor. (UG)

MUSC 341 VOCAL PEDAGOGY (2) Theory and practice of the teaching of singing based on national styles, historical approaches and the physiology of the voice. Prerequisites: MUSC 281 or consent of instructor, MUSC 245 & 246. (UG)

MUSC 378 PIANO PEDAGOGY (3) Instructional methods and teaching materials used in the teaching of piano students. Prerequisite: MUSA 278 or consent of instructor. (UG)

MUSC 399 JUNIOR RECITAL (1) Preparation and performance of junior recital as required for Bachelor's degree with concentration in performance. Graded under S/U procedure. Prerequisite: Minimum of 4 credits of private lessons and junior standing in music. Must be enrolled concurrently in private lessons at the junior level. (UG)

MUSC 401 [501] MUSIC PRIOR TO 1600 (3) The art of music in the West from its tentative beginnings in Greek and Hebrew to the year 1600 A.D. Prerequisite: MUSC 301 or consent of instructor. (UG & G)

MUSC 402 [502] MUSIC OF THE BAROQUE PERIOD (3) Study of the development of music style, forms and compositional techniques during the period from 1600 to about 1750. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 403 [503] MUSIC OF THE CLASSICAL PERIOD (3) Styles, forms and techniques of the period from 1750-1820. Particular emphasis is placed on instrumental categories of the string quartet, sonata, symphony and concerto as illustrated in the works of Haydn, Mozart and Beethoven. Attention is given to operatic and sacred compositions of the same masters. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 404 [504] MUSIC OF THE ROMANTIC PERIOD (3) Musical styles, forms and techniques in the 19th century with special attention to the intellectual foundations of the Romantic movement. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 405 [505] CONTEMPORARY MUSIC (3) Styles, forms and musical techniques since 1900. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 406 [506] SURVEY OF SOLO VOICE LITERATURE (3) A musical survey of the art-song form circa 1750 to the present. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 407 [507] TONAL COUNTERPOINT (3) A study of the polyphonic practices employed in 18th century tonal counterpoint. Prerequisite: MUSC 232. (UG & G)

MUSC 408 [508] MODAL COUNTERPOINT (3) Analysis and writing of counterpoint in the style of Sixteenth Century masters such as Palestrina and Lassus. The approach of traditional species practice will be employed. Prerequisite: MUSC 232 or equivalent. (UG & G)

MUSC 409 [509] HISTORY AND LITERATURE OF GUITAR, LUTE, AND VIHUELA (3) A survey of the history and literature written for or readily adaptable to the guitar. Includes study of tablatures and transcriptions to modern notation. Prerequisite: MUSC 232 or consent of instructor. (UG & G)

MUSC 410 [510] SURVEY OF ORGAN LITERATURE (3) A study of the literature of the organ from the beginnings of the Baroque Period to the present. Music covered will include that of the early Italian, French, and English schools; French Classical and North German Baroque; J. S. Bach and his followers; French & German organ music of the 19th Century and a survey of organ music of the 20th Century. Prerequisites: MUSC 102; MUSC 232 or consent of instructor. (UG)

MUSC 411 [511] SURVEY OF OPERA (3) Study of opera literature of various periods and styles. Prerequisite: Junior or Senior standing or consent of instructor. (UG & G)

- MUSC 412 [512] WIND ENSEMBLE (1)** Study and performance of advanced wind literature by a small band of selected instrumentalists. Audition Required. Prerequisites: Audition and consent of instructor. (UG & G)
- MUSC 413 [513] SYMPHONIC LITERATURE (3)** Survey of orchestral music from the Classical Era to the present. Includes symphony, overture, and symphonic poem. Prerequisite: MUSC 232 or consent of instructor. (UG & G)
- MUSC 415 [515] THE CONCERTO (3)** A survey of the concerto form from its inception to the present. Analysis of stylistic, formal, and compositional aspects will be included. Prerequisite: MUSC 232 or consent of instructor. (UG & G)
- MUSC 417 [517] PIANO LITERATURE (3)** A survey of piano literature from 1600 to the present. Primarily a lecture/demonstration course, but with assigned reading and assigned listening. Prerequisite: MUSC 232 or consent of instructor. (UG & G)
- MUSC 420 [520] WORKSHOP IN MUSIC INSTRUMENT REPAIR (1)** The course offered during the period of the summer music camp will focus upon practical problems and methodology of instrument repair and maintenance. Items/activities of the course will include, but not be limited to: 1) identifying repair problems, 2) equipment necessary for repair, and 3) repair methodology. The course will also provide information concerning maintenance and avoidance of repairs. Prerequisite: Six semesters of applied music or equivalent. (UG & G)
- MUSC 421 [521] AMERICAN MUSIC (3)** American music from the Colonial Period to the present. Prerequisite: Junior standing or consent of instructor. (UG & G)
- MUSC 427-428 [527-528] JAZZ ARRANGING I, II (3, 3)** Study and practice of arranging of standard material for Jazz Ensembles. Prerequisite: MUSC 232 or consent of instructor. (UG & G)
- MUSC 429-430 [529-530] JAZZ IMPROVISATION I, II (3, 3)** Study and practice of improvising in various jazz styles. Prerequisite: MUSC 231-232 or consent of instructor. (UG & G)
- MUSC 431 [531] ADVANCED CHORAL AND INSTRUMENTAL ARRANGING (3)** Advanced arranging techniques including the scoring of original and other works for various combinations of instruments and/or voices. Prerequisite: MUSC 335, or equivalent, or consent of instructor. (UG & G)
- MUSC 432 [532] SEMINAR IN ADVANCED INSTRUMENTAL CONDUCTING AND INTERPRETATION (1)** Provides opportunity to study and discuss music literature and performance problems with nationally known conductors during the music camp. Music selected to be performed by the camp participants will be examined and evaluated in terms of conducting techniques and interpretation. As a part of this process, students will be required to observe and evaluate camp performances. Prerequisite: MUSC 329 or equivalent and/or consent of instructor. (UG & G)
- MUSC 435 [535] FORM AND ANALYSIS (3)** Analysis of vocal and instrumental literature. Prerequisite: MUSC 232. (UG & G)
- MUSC 441 CHURCH MUSIC SKILLS (3)** Study of skills and techniques required of full-time church musicians, including anthem and service music preparation, rehearsal planning and organization, playing the services of all major denominations, improvisation, transposition and related skills. Prerequisite: MUSA.274 or permission of department chair. (UG)
- MUSC 449-450 [549-550] STRING ENSEMBLE (1, 1)** Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of director. May be repeated with credit. (UG & G)
- MUSC 459-460 [559-560] TOWSON STATE UNIVERSITY CHORAL SOCIETY (1, 1)** Study and performance of advanced choral literature. May be repeated with credit. (UG & G)
- MUSC 467-468 [567-568] ORCHESTRA (1, 1)** Study of orchestral literature. Open to all students by audition. May be repeated with credit. (UG & G)
- MUSC 469-470 [569-570] SYMPHONIC BAND (1, 1)** Study and performance of advanced wind and percussion literature by a large

band of selected instrumentalists. Personnel to be determined by balanced instrumentation. Prerequisite: Audition and permission of instructor. (UG & G)

- MUSC 471-479 [571-579] SPECIAL TOPICS IN MUSIC LITERATURE (3)** Consideration of a central topic of Music Literature with a different topic selected each semester. May be reelected. Prerequisite: MUSC 232 and consent of instructor. (UG & G)

- MUSC 493 [593] INDEPENDENT RESEARCH IN MUSIC LITERATURE (1-4 credits undergraduate; 3 credits graduate)** Supervised research and musicological investigation of a selected topic culminating in a written senior thesis. May be repeated with credit. Prerequisites: MUSC 301, MUSC 302, and six hours of Advanced Music Hist. courses. (UG & G)

- MUSC 499 SENIOR RECITAL (1)** Recital performance for graduation requirement. Prerequisites: Minimum of 6 credits in Private Lessons and approval of Department Chair. Undergraduate credit only. Graded under S/U procedure. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

- MUSC 601 ADVANCED OPERA WORKSHOP (1)**
- MUSC 618 WORKSHOP IN CLASS PIANO PEDAGOGY (2)**
- MUSC 631 ADVANCED THEORY (3)**
- MUSC 633 ADVANCED WOODWINDS (DOUBLE REEDS) (3)**
- MUSC 639 MUSIC COMPOSITION (3)**
- MUSC 661 SEMINAR IN INSTRUMENTAL MUSIC (3)**
- MUSC 662 SEMINAR IN CHORAL (VOCAL) MUSIC (3)**
- MUSC 670-679 SPECIAL TOPICS IN MUSIC (3)**
- MUSC 695 RESEARCH METHODS IN MUSIC AND MUSIC EDUCATION (3)**
- MUSC 897 GRADUATE PROJECT IN MUSIC (3)**
- MUSC 898 MASTER'S THESIS IN MUSIC (3)**
- MUSC 899 THESIS CONTINUUM (1)**

MUSIC APPLIED (MUSA)

Lower Division

- MUSA 161-162 ACCORDION PRIVATE LESSONS (1-2)** Private lessons in accordion. Fee of \$50 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of department chair. (UG)
- MUSA 171-172 BRASS PRIVATE LESSONS (1-2)** Private lessons in brass. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)
- MUSA 173-174 PIPE ORGAN PRIVATE LESSONS (1-2)** Private lessons in organ. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)
- MUSA 175-176 PERCUSSION PRIVATE LESSONS (1-2)** Private lessons in percussion. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)
- MUSA 177-178 PIANO PRIVATE LESSONS (1-2)** Private lessons in piano. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)
- MUSA 179-180 STRING PRIVATE LESSONS (1-2)** Private lessons in strings. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per

week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)

MUSA 181-182 VOICE PRIVATE LESSONS (1-2) Private lessons in voice. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)

MUSA 183-184 WOODWIND PRIVATE LESSONS (1-2) Private lessons in woodwinds. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)

MUSA 185-186 GUITAR PRIVATE LESSONS (1-2) Private lessons in guitar. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)

MUSA 187-188 COMPOSITION PRIVATE LESSONS (1-2) Private lessons in composition. Fee of \$50.00 per semester per credit. One half-hour private lesson per week per credit plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of dept. chair. (UG)

MUSA 189-190 HARPSICHORD PRIVATE LESSONS (1 or 2) Private lessons in harpsichord. Fee of \$50.00 per semester per credit. One half hour lesson per week per credit, plus one hour class lesson per week. May be repeated for credit. Prerequisite: Permission of department chair. Equivalent proficiency level of junior in piano or organ and consent of instructor. (UG)

MUSA 261-290 PRIVATE LESSONS (1-2) Refer to 161-190 for course description, fee and time. May be repeated for credit. (UG)

Upper Division

MUSA 361-390 PRIVATE LESSONS (1-2) Refer to MUSIC 161190 for course description, fee and time. May be repeated for credit. (UG)

MUSA 461-490 PRIVATE LESSONS (1-2) Refer to MUSIC 161190 for course description, fee and time. May be repeated for credit. (UG & G)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

MUSA 671-690 PRIVATE LESSONS (1-2)

MUSA 693 ADVANCED PERFORMANCE TECHNIQUES (3)

MUSIC EDUCATION (MUED)

Lower Division

MUED 241 TEACHING GUITAR IN THE CLASSROOM (2) Development of basic performance technique, visualization, repertoire, pedagogy, curriculum and performance analysis. (UG)

Upper Division

MUED 304 METHODS OF TEACHING MUSIC IN EARLY CHILDHOOD EDUCATION (2) Methods and materials in music education for children ages three through eight in a laboratory setting. Early Childhood Education majors only. Prerequisites: MUSC. 101; Concurrent Pre-Primary Curriculum ECED.341; Not open to students who have completed MUED.307.

MUED.305 METHODS OF TEACHING MUSIC IN ELEMENTARY EDUCATION (2) Methods and materials for teaching music in elementary school presented in a laboratory setting. Elementary education majors only. Prerequisites: MUSC.107; Not open to students who have completed MUED.307.

MUED 306 METHODS OF TEACHING INSTRUMENTAL MUSIC IN ELEMENTARY SCHOOLS (4) Instrumental music programs in elementary schools and working with children in a laboratory

setting. Music Education Majors one semester prior to student teaching. Prerequisites: Music major, junior standing. Successful completion of Piano Proficiency test.

MUED 307 METHODS OF TEACHING VOCAL-GENERAL MUSIC IN THE ELEMENTARY SCHOOL (4) Vocal-general programs in elementary schools: Orff, Kodaly, and Dalcroze techniques and principles with children in a laboratory setting. Music majors in semester prior to student teaching. Prerequisites: Music major, junior standing; Successful completion of Piano Proficiency Test.

MUED 308 METHODS OF TEACHING INSTRUMENTAL MUSIC IN SECONDARY SCHOOLS (2) Methods and materials for the instruction of instrumental music. Concurrent with student teaching. Prerequisite: MUED.307.

MUED 309 METHODS OF TEACHING VOCAL-GENERAL MUSIC IN SECONDARY SCHOOLS (2) Methods and materials for instruction of vocal-general music. Concurrent with student teaching. Prerequisite: MUED.337; MUED.307.

MUED 337 TEACHING CHORAL MUSIC IN THE ELEMENTARY AND THE SECONDARY SCHOOL (2) Examination of materials, methods, and procedures in organizing school choral groups and in teaching choral music to elementary and secondary students. Prerequisites: MUSC 327 (UG)

MUED 408 [508] ORGANIZATION AND ADMINISTRATION OF MUSIC EDUCATION (2) Seminar discussion of the problems of organization and administration of music education. Prerequisite: Music Student Teaching or consent of instructor. (UG & G)

MUED 419 [519] WORKSHOP: ASPECTS OF STRING TEACHING (2-6) An extension course to be offered at various locations. The workshop includes private lessons, master classes, supervised laboratory experiences, as well as concerts, lectures and rehearsals designed to enrich the experience of string teachers and those interested in becoming public school string teachers. Sessions will vary in length from one to six weeks with appropriate credit awarded according to course requirements and contact hours. Prerequisite: Fulfillment of all requirements for teacher certification in instrumental music and consent of instructor. (UG & G)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

MUED 601 SEMINAR IN CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (3)

MUED 603 MUSIC IN SPECIAL EDUCATION (3)

MUED 617 CHORAL WORKSHOP IN ELEMENTARY AND SECONDARY SCHOOL MUSIC (2)

MUED 621 WORKSHOP: TEACHING GUITAR IN THE CLASSROOM (2)

MUED 639 ADVANCED WORKSHOP IN ELEMENTARY AND JUNIOR HIGH SCHOOL GENERAL MUSIC (2)

MUED 670-679 WORKSHOPS IN MUSIC EDUCATION (2-3)

NURSING (NURS)

Lower Division

NURS 201 CONCEPTS OF NURSING I (3) Professional nursing with emphasis on the nursing process; individual client, nursing, and health care systems, wellness-illness continuum focusing on health maintenance and promotion; human needs; cultural diversity; socioeconomic differences and environmental settings; stress and stressors, and adaptation and change. Prerequisite: admission to the Nursing major by Departmental Faculty. Not open to those who have taken NURS 221. (UG)

NURS 203 NURSING: CLIENT HEALTH MAINTENANCE AND PROMOTION (3) Theoretical foundation and clinical application of the nursing process to assist individual clients with self-care activities in relation to health maintenance and promotion. Prerequisite or concurrent: NURS 201. Not open to those who have taken NURS.221. (UG)

Upper Division

NURS 301 CONCEPTS OF NURSING II (3) A theoretical foundation for application of the nursing process to families and to individuals with acute or well defined chronic disequilibrium. Prerequisites: NURS 201 and NURS 203. (UG)

NURS 303 PHARMACOPATHOPHYSIOLOGIC IMPLICATIONS FOR NURSING PRACTICE (3) Pathophysiologic processes in relation to alterations in human system needs, adaptive or maladaptive responses to stress. Pharmacological classifications with related nursing responsibilities are included. Prerequisite or concurrent: NURS 301. (UG)

NURS 305 HEALTH ASSESSMENT (1) Laboratory opportunities to learn physical and psychosocial nursing assessment skills. Prerequisite or concurrent: NURS 301. (UG)

NURS 307 NURSING: PSYCHOMOTOR SKILLS (1) Laboratory opportunities to develop selected psychomotor skills. Prerequisite or concurrent: NURS 301. (UG)

NURS 309 NURSING: FAMILY SYSTEM MEMBERSHIP CHANGE (6) Theoretical foundation and clinical application of the nursing process to individuals and families, focusing on health maintenance and promotion, adaptation to stress, and change in system membership. Prerequisite or concurrent: NURS 303; NURS 305, and NURS 307. (UG)

NURS 313 NURSING: CLIENT PHYSIOLOGICAL DISEQUILIBRIUM (6) Theoretical foundation and application of the nursing process to individuals experiencing disequilibrium, maladaptation and destructive behaviors resulting in illness or death. Prerequisite or concurrent: NURS 303; NURS 305, and NURS 307. (UG)

NURS 315 NURSING: CLIENT BEHAVIORAL DISEQUILIBRIUM (6) Theoretical foundation and application of the nursing process to individuals with behavioral disequilibrium. Patterns of maladaptive behavior and their effect on the individual and family are analyzed. Prerequisite or concurrent: NURS 309 and/or NURS 313. (UG)

NURS 401 CONCEPTS OF NURSING III: INTERDISCIPLINARY SYSTEMS APPROACH TO HEALTH CARE DELIVERY (3) An integration of the knowledge of the humanities will provide nursing with an interdisciplinary systems view of health care. Broad concepts concerning political, social and cultural, economic, values, ethical, legal, educational, and technological and informational systems will provide the foundation for input of these concepts to the nursing system and given implications of the systems' influence on present and future nursing practice. Learning opportunities will occur in the classroom. This course meets a General University Requirement for Nursing Majors (GUR Group III). Prerequisites: NURS 309; NURS 313; NURS 315.

NURS 403 NURSING: CLIENT CARE IN A COMMUNITY ENVIRONMENT (6) This course focuses on individuals, families, and groups of clients in the community who are experiencing biopsychosocial disequilibria involving primary, secondary, and tertiary levels of nursing care, with emphasis on the tertiary level. Experiences include independent application of the nursing process to clients from diverse stages of growth and development, belief systems, and cultural and environmental backgrounds. Learning opportunities occur in the classroom and selected community settings. Prerequisite or concurrent: NURS 401.

NURS 405 NURSING: COMPLEX CARE FOR ADULTS AND CHILDREN (6) This course focuses on individuals, families, and groups of clients requiring a tertiary level of response to alterations in human system needs resulting from pathophysiologic manifestations. Experiences include guided and independent application of the nursing process to clients across the life cycle who have different belief systems as well as diverse cultural and environmental backgrounds. Learning opportunities will occur in the classroom and selected clinical health care environments. Prerequisite or concurrent: NURS 401.

NURS 407 NURSING: ADVANCED CONCEPTS AND ISSUES (9) Inputs from supraordinate systems affecting the nursing system, nursing research applicable to nursing practice, the nursing process, and leadership related to the care of individuals, families

and groups of clients, the nursing work groups, and the interdisciplinary health team are considered. This course meets the second writing requirement of the University for Nursing students (GUR Group I). Learning will occur in the classroom and selected health care environments. Prerequisite: NURS 401; NURS 403; NURS 405.

NURS 491 DIRECTED READINGS (1-3) Independent reading designed to explore topics and/or issues of special interest to the practice of nursing. Prerequisites: Completion of all 300 level nursing courses and permission of Chair of the Department. (UG)

NURS 493 INDEPENDENT STUDY (1-3) Directed Study designed to provide an in-depth educational experience in Nursing. Topics related to theory and practice of nursing. Prerequisites: Completion of all 300 level nursing courses or equivalents and permission of Chair of Department. (UG)

OCCUPATIONAL THERAPY (OCTH)

Lower Division

OCTH 101 INTRODUCTION TO OCCUPATIONAL THERAPY: PRINCIPLES AND PRACTICE (3) An introduction to occupational therapy and study of its practice, including supervised clinical observation in occupational therapy settings for the purpose of enriching basic understanding of evaluation techniques and treatment, building interpersonal skills and developing self-awareness. Fall & Spring. Prerequisite: Pre- and Occupational Therapy majors only. (UG)

OCTH 103 LEISURE AND HEALTH (3) Leisure activity and its meaning in people's lives will be studied, along with historical, present and future trends in leisure time use. The importance of leisure to health maintenance will be discussed, and strategies for personally healthful leisure activity will be planned. (UG)

OCTH 116 BIO-PSYCHO-SOCIAL DEVELOPMENT (3) A survey of the normal development process in human beings covering the entire life cycle, and including discussion of deviations from the normal. Stresses the development of work/play behavior; theoretical material and research findings are presented. Prerequisites: BIOL 110, PSYC 101, SOCI 101. Pre and Occupational Therapy Majors only. (UG)

OCTH 211 PHILOSOPHY OF OCCUPATIONAL THERAPY (3) Delineation and study of the relation of occupation to health, concentrating on a variety of types of occupation, including play, self-care, education, employment, recreation, leisure, and homemaking, and illustrating the effects of health and ill health on occupational behavior. Prerequisites: OCTH 101, OCTH 116. (UG)

OCTH 213 SMALL GROUP DYNAMICS (3) A study of small groups used in therapeutic or health education settings. Lectures will examine group members and leaders' roles, stages of a group's life, theory of developmental groups, and the structure and function of a variety of small groups used in therapy, education, and community settings. Participatory experiences will supplement lectures to promote personal communication and effectiveness in groups. Prerequisites: SOCI 101, PSYC 101. (UG)

OCTH 217-218 TASK ANALYSIS I AND II (4, 4) An introduction to the gathering of occupational history data, analyses of tasks and skills, development of occupational performance skills in areas pertinent to students' needs and interests, and adaptation of equipment for special requirements. Integrates knowledge and skills for occupational therapy services which foster healthy development, prevent health problems, maintain optimal function, and develop occupational performance skills. Prerequisites: May be taken concurrently with OCTH 101 and OCTH 116. (OCTH.217—Fall; OCTH.218—Spring). (UG)

OCTH 221 CLINICAL KINESIOLOGY (3) Principles of bio-mechanics, muscle physiology, joint structure and muscle function, emphasizing palpation of anatomical structures and analysis of movement. Not open to students who have taken Kinesiology PHEC 311. Prerequisite: OCTH 217 and PHYS 201 or equivalent. (UG)

Upper Division

OCTH 313 PRINCIPLES OF PHYSICAL DISABILITIES (3) Fundamentals of occupational therapy theory and practice applied to adult physical disabilities. Prerequisites: OCTH 211, OCTH 217-218, OCTH 221, BIOL 213-214, BIOL 427. Fall. (UG)

OCTH 314 PRINCIPLES OF PSYCHOSOCIAL DYSFUNCTION (4) Fundamentals of occupational therapy theory and practice in treatment of psychosocial dysfunction. Prerequisites: OCTH 211, OCTH 217-218, OCTH 213 and PSYC 361; concurrent with OCTH 320. Spring. (UG)

OCTH 315-316 PATHOLOGICAL CONDITIONS I AND II (3, 3) The etiology, physiology, performance effects, treatment approaches, precautions, and prognoses of disabilities amenable to occupational therapy. The disabilities discussed include emotional, neurologic, orthopedic, and general medical conditions. Prerequisites: BIOL 213-214, BIOL 427; PSYC 361 to be taken concurrently with OCTH 315. (OCTH 315—Fall; OCTH 316—Spring.) (UG)

OCTH 318 INDEPENDENT STUDY (1-6) Directed independent study designed to provide students with an in-depth investigation of an area or problem specific to occupational therapy. Consultation and supervision with designated faculty members and/or clinical practitioners. Prerequisites: Undergraduate major in occupational therapy, consent of instructor. Repeatable up to a total of six credits. (UG)

OCTH 319 PHYSICAL DYSFUNCTION PRACTICUM (2) Laboratory and clinical practice in specific evaluation and treatment techniques in physical disabilities. Prerequisites: OCTH 211, OCTH 217-218, OCTH 221, BIOL 213-214, BIOL 427, to be taken concurrently with OCTH 313. Fall. (UG)

OCTH 320 PSYCHOSOCIAL DYSFUNCTION PRACTICUM (2) Laboratory and clinical practice in specific evaluation and treatment techniques in psychosocial occupational therapy. Prerequisites: OCTH 211, OCTH 217-218, OCTH 213, PSYC 361, to be taken concurrently with OCTH 314. Spring (UG)

OCTH 325 PEDIATRIC OCCUPATIONAL THERAPY (4) Fundamentals of occupational therapy theory and practice from birth through adolescence including normal function and dysfunction. Therapeutic approaches, assessments, goal setting, treatment planning and implementation. Prerequisites: OCTH 218, OCTH 221, BIOL 213-214, BIOL 427. Fall. (UG)

OCTH 428 [528] OCCUPATIONAL THERAPY ORGANIZATION AND ADMINISTRATION (3) Administrative and organizational theory applied to occupational therapy service programs. Content includes personnel relationships and supervision, systems analysis, program planning, budgeting, space and facilities planning, communication systems, and programs for staff and student development. Prerequisites: OCTH 213, HLTH 207. Fall. (UG & G)

OCTH.429 SEMINAR IN OCCUPATIONAL THERAPY (1) Educational experiences related to a variety of new occupational therapy topics depending on the needs and interests of students. Prerequisites: OCTH 313, OCTH 319. Fall and Spring. (UG)

OCTH 430 RESEARCH METHODS IN OCCUPATIONAL THERAPY (3) Guided, independent research in topics related to occupational therapy theory and practice. Presentation of introductory materials on research methods. Second writing course. Prerequisites: MATH 237, OCTH 313, OCTH 319. Fall and Spring. (UG)

OCTH 435-436 OCCUPATIONAL THERAPY INTERNSHIP I AND II (7, 7) Three months each full-time supervised field work experience for learning and applying knowledge and skills required for the practice of occupational therapy in physical and psychosocial dysfunction. Prerequisites: OCTH 313-314, OCTH 319-320, OCTH 325. (UG)

OCTH 437 SPECIALTY INTERNSHIP (3-7) An optional field education experience of one to three months designed to meet special needs or interests. May include such areas of practice as mental retardation, cerebral palsy, sensory impairments, child psychiatry, adolescent psychiatry, special education, pediatrics, geriatrics,

public health, drug abuse or penology. Prerequisites: OCTH 313-314, OCTH 319-320, OCTH 325. (UG)

OCTH 470-479 [570-579] SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3) Designed to explore topics of special interest in the theory and practice of occupational therapy. Prerequisite: consent of instructor. May be repeated for a maximum of three credits. (UG & G)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

OCTH 601 PSYCHOSOCIAL OCCUPATIONAL THERAPY (3)

OCTH 603 ISSUES IN OCCUPATIONAL THERAPY (3)

OCTH 611 ADVANCED OCCUPATIONAL THERAPY THEORY AND PHILOSOPHY (3)

OCTH 613 ADVANCED RESEARCH METHODS IN OCCUPATIONAL THERAPY (3)

OCTH 621 ASSESSMENT TECHNIQUES IN GERONTIC OCCUPATIONAL THERAPY (3)

OCTH 623 ASSESSMENT IN PEDIATRIC OCCUPATIONAL THERAPY (3)

OCTH 625 ASSESSMENT AND TREATMENT OF THE ADULT WITH BIOMECHANICAL DYSFUNCTION (3)

OCTH 627 ASSESSMENT AND TREATMENT OF THE ADULT WITH CENTRAL NERVOUS SYSTEM DYSFUNCTION (3)

OCTH 631 TREATMENT IN GERONTOLOGY (3)

OCTH 633 OCCUPATIONAL THERAPY TREATMENT IN PEDIATRICS (3)

OCTH 670-679 SPECIAL TOPICS IN OCCUPATIONAL THERAPY

OCTH 691 DIRECTED READINGS IN OCCUPATIONAL THERAPY (1-3)

OCTH 781 GRADUATE SEMINAR IN OCCUPATIONAL THERAPY (3)

OCTH 791 INDEPENDENT STUDY (1-6)

OCTH 897 GRADUATE PROJECT IN OCCUPATIONAL THERAPY (3)

OCTH 898 THESIS (6)

OCTH 899 THESIS CONTINUUM (1)

OPERATIONS MANAGEMENT (OPRE)

OPRE.419 LOGISTICS MANAGEMENT (3) The study of materials management and materials support service and product delivery. Topics include: 1) technical support in terms of service, maintenance, warranty policies, and configuration management; 2) materials handling technology in terms of packaging, shipping, bar codes, fleet maintenance, and automated warehouse management; 3) economics of alternatives in distribution/transportation strategies; 4) impact of logistics management on operations scheduling and inventory; and 5) issues in international logistics management. Prerequisites: Senior standing, MNGT 365 and OPRE 439. (UG).

OPRE 439 MATERIALS MANAGEMENT (3) The study of the operation function from the perspective of the material flow through an organization. Focus is on inventory management and production control. Prerequisites: Senior standing, MNGT.365. (UG). (Not open to those who completed 0507.439.)

OPRE 459 PURCHASING MANAGEMENT (3) The study of the purchasing process in both the private and public sectors. The role of purchasing management in providing support to operations management is emphasized. Prerequisites: Senior standing. (UG) (Not open to those who completed 0507.459)

OPRE 470-479 SPECIAL TOPICS IN OPERATIONS MANAGEMENT (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current operations management practices. Prerequisite: Consent of instructor. Special Permit only. (UG) (Not open to students who have taken 0506.470-479.)

- OPRE 491 DIRECTED READINGS (Operations Management) (1-3)** Readings in selected functional or conceptual areas of operations management. Prerequisite: Consent of instructor, Senior standing. Special Permit. (UG) (Not open to students who have taken 0506.491.)
- OPRE 495 INDEPENDENT RESEARCH (Operations Management) (1-3)** Directed research on specific problems in a functional area of operations management. May be re-elected for a maximum total of 6 credits. Prerequisite: Junior standing, all 200 and 300 level BUAD core courses, Special permit requirements. (UG) (Not open to students who have taken 0506.495.)
- OPRE 497 PRACTICUM: Operations Management (3)** Students are required to work in assigned projects in actual business environments. Priority will be given to seniors. Open to highly qualified juniors. Graded under S/U procedure. May be re-elected for a maximum total of 6 credits. Note: A cumulative grade point average of at least 2.50 is preferred. Prerequisite: Consent of instructor. Special Permit. [Co-op Fee Required] (UG) (Not open to students who have taken 0506.497.)

PHILOSOPHY AND RELIGION (PHIL)

Lower Division

- PHIL 101 INTRODUCTION TO PHILOSOPHY (3)** An introduction to some fundamental problems of philosophy and to various proposals for the solution of these problems. (UG)
- PHIL 105 INTRODUCTION TO THE STUDY OF RELIGION (3)** A study of various religious explanations and organizations of the cosmos and of human life, drawing on diverse theoretical methodologies. (UG)
- PHIL 111 LOGIC (3)** Study of and practice in inductive and deductive reasoning, the composition of argument and demonstration, and the detection of formal and informal fallacies. (UG)
- PHIL 201 SOCIAL AND POLITICAL PHILOSOPHY (3)** A consideration of social and political doctrines from both Western and non-Western philosophical perspectives. The approach will be both historical and thematic. Themes will include: the individual and the state, the male-female dialectic, and attitudes toward property. (UG)
- PHIL 212 HONORS COURSE: SPECIAL STUDIES IN PHILOSOPHY (3)** Small group discussions and philosophical analysis of selected works not generally available in other electives. Prerequisites: Admission to honors college.
- PHIL 219 INTRODUCTION TO ASIAN PHILOSOPHY (3)** Examination of the nature of Asian thought through a study of English translations of traditional sources of Indian, Tibetan, Chinese, and Japanese philosophy. (UG)
- PHIL 221 ANCIENT GREEK PHILOSOPHY (3)** The origins of Western philosophical thought will be studied in the works of the presocratics, Socrates, Plato, and Aristotle. (UG)
- PHIL 230 PHILOSOPHY OF LITERATURE (3)** The course undertakes philosophical analysis of literature. A consideration of philosophical orientations in these works will be undertaken. (UG)
- PHIL 231 SCIENCE, TECHNOLOGY, AND VALUES (3)** Impact of modern science on various philosophical issues: science and religion, mind and computers, time travel, Einstein's relativity, human freedom, the ethical limits of technology. No scientific background is assumed. (UG)
- PHIL 251 CONTEMPORARY AFRICAN-AMERICAN THOUGHT (3)** A philosophical examination of the current issues in African-American thought in such fields as religion, politics, education, economics and aesthetics. An effort will be made to determine the place and the role of the contemporary African-American in history. (UG)
- PHIL 270-279 PHILOSOPHICAL PERSPECTIVES (3)** The course will consider contemporary issues from the uniquely philosophical perspective to stimulate independent reflection on the part of the student. (UG)

Upper Division

- PHIL 301 [501] PHILOSOPHIES OF INDIA (3)** Examination of major ideas in the Vedic, Epic, Classical darsana, and modern periods. Prerequisite: One lower level course in philosophy or consent of instructor. (UG & G)
- PHIL 302 [502] PHILOSOPHIES OF CHINA AND JAPAN (3)** Examination of some major philosophical systems through selected writings in translation. Prerequisite: One lower level course in philosophy or consent of instructor. (UG & G)
- PHIL 311 SYMBOLIC LOGIC (3)** An introduction to the concepts and methods of symbolic logic. Translation of arguments from English into symbolic notation; methods of establishing the validity of arguments by means of symbolic logic. Discussion of logical notions such as consistency and inconsistency, logical truth, and the philosophy of logic. Prerequisite: PHIL 111 or consent of instructor. (UG)
- PHIL 320 PHILOSOPHY OF SCIENCE (3)** Concepts, method and nature of science including induction and theory confirmation, probability, explanation, natural laws, space and time and the objectivity of science. Prerequisites: One course in either philosophy or science. (UG)
- PHIL 321 PHILOSOPHY OF LAW (3)** An examination of the nature and theories of law, the relationship between law and morality, the nature of legal obligation, and the notion of justice. (300 level) Prerequisites: One lower course in Philosophy or consent of the instructor.
- PHIL 322 [522] LATE CLASSICAL AND MEDIEVAL PHILOSOPHY (3)** This course will deal with the philosophical schools of the Hellenistic and Roman periods, viz., Stoicism, Epicureanism, Scepticism and Neo-Platonism and with the two main Christian philosophies of the Middle Ages, viz., Augustinianism and Thomism. Emphasis will be placed on the fusion of Greek and Jewish moral and religious speculation and the rise of Christianity. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 323 [523] LATE MEDIEVAL AND RENAISSANCE PHILOSOPHY (3)** Philosophers and philosophical currents of the 14th, 15th and 16th centuries. Emphasis will be placed on transformations in Western thought and the emergence of new themes and directions: forms of nominalism and new concepts of thinking and knowledge; new forms of mysticism; new and multiple cosmologies and concepts of substance. The appearance of philosophies of man, love and social and political action; new concepts of will, virtue and power. The emergence of interrelationships between philosophy and science and technology; new concepts of history; the development of an ideal of social immortality. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 324 [524] MODERN PHILOSOPHY (3)** The history of philosophy beginning with Descartes through the 19th century. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 325 [525] SCHOOLS OF CONTEMPORARY PHILOSOPHY (3)** A survey with varying emphasis on a number of such contemporary philosophical positions as pragmatism, phenomenology, logical positivism, the analysts, neo-Aristotelianism, the philosophers of science, and the existentialists. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 326 [526] AMERICAN PHILOSOPHY (3)** The history of the main currents of American philosophical thought as exemplified in such writers as Edwards, Emerson, Pierce, James, Royce, Dewey and Whitehead. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 331 [531] CONCEPTS OF WOMAN: AN HISTORICAL APPROACH (3)** Various concepts which philosophers have used to define woman. A historical survey approach, with readings from Plato, Aquinas and others, and ending with Beauvoir. Prerequisite: One lower-division course in philosophy. (UG & G)
- PHIL 339 [539] THEORIES OF KNOWLEDGE (3)** An historical and systematic approach to the truth value and elements of the forms of human knowledge. The theories of major philosophers will be studied. Prerequisite: One lower-division course in philosophy. (UG & G)

PHIL 341 [511] ETHICS (3) Analysis of readings from the principle classical and contemporary ethical sources, study of the basic moral concepts as found in these sources; application to contemporary moral concerns. Prerequisite: One lower-division course in philosophy. (UG & G)

PHIL 343 [509] AESTHETICS (3) An analytical and historical examination of concepts of the nature of art, beauty, aesthetic value, aesthetic perception, and of the modes of existence of artifacts. Prerequisite: One lower-division course in philosophy. (UG & G)

PHIL 351 [551] CONTEMPORARY ETHICAL PROBLEMS (3) The course will treat the meaning of moral experience and the moral problems which arise in connection with human sexual integrity, ownership of property, welfare, violence, civil disobedience, punishment, war, and truth telling in social relations and government. Prerequisite: One lower-division course in philosophy. (UG & G)

PHIL 354 [554] INTERPRETATIONS OF THE BIBLE: OLD TESTAMENT (3) Major themes of the Biblical Literature, and of its religious, philosophical and cultural implications. Prerequisite: One lower-division course in philosophy or religion. (UG & G)

PHIL 355 [555] INTERPRETATIONS OF THE BIBLE: NEW TESTAMENT (3) Major themes of the Biblical Literature, and of its religious, philosophical and cultural implications. Prerequisite: One lower-division course in philosophy or religion. (UG & G)

PHIL 361 [561] ETHICS OF MEDICINE AND THE LIFE SCIENCES (3) A search for guidelines in such moral problems as abortion, the care of the dying, organ transplants, informed consent in therapy and experimentation, adequate health care and its just distribution, control of human behavior by drugs, surgery, etc., test-tube reproduction, population control, genetic engineering and counseling. Prerequisite: One lower-division course in philosophy or consent of instructor. (UG & G)

PHIL 371 [563] BUSINESS ETHICS (3) Economics is one of the "moral sciences" in so far as it deals with an important sphere of human activity which intends a good. This course will institute a philosophical reflection on economic ideas as they appear in the three main categories of opinion, viz., conservative, liberal and radical. Attention will be drawn to the epistemological, ethical and metaphysical presuppositions of these traditions. Prerequisite: A lower-division course in philosophy or consent of instructor. (UG & G)

PHIL 380-389 [580-589] PHILOSOPHICAL TOPICS (3) Courses offered under this title will be of variable content. Topics of traditional philosophical interest or of philosophical problems in other areas of knowledge or of contemporary interest will be offered. Prerequisite: One lower-division course in philosophy. (UG & G)

PHIL 413 [513] PHENOMENOLOGY (3) An examination of phenomenology as both a philosophical method and philosophical position. Theme to be considered include consciousness, the body, time and the experience of others. Primary course readings in the works of Husserl, Heidegger, Sartre, Merleau-Ponty. Prerequisite: Two previous courses in philosophy. (UG & G)

PHIL 415 [515] MARXISM (3) The course examines the basic concepts of Marxist philosophy. It considers such topics as dialectical reason, alienation, class society, the state, and Marx, Engels, Lenin, Luxemburg, Nkrumah, Lukacs, Gramsci. Prerequisite: Two previous courses in philosophy. (UG & G)

PHIL 417 [517] EXISTENTIALISM (3) Some of the major existentialist philosophers will be studied, e.g., Kierkegaard, Nietzsche, Heidegger, Sartre, Beauvoir. The philosophical themes of transcendence, the absurd, estrangement and anxiety will be considered. Prerequisite: Two previous courses in philosophy. (UG & G)

PHIL 440-449 [540-549] PHILOSOPHICAL SYSTEMS (3) The study of a major philosophical system or position, classical or modern, and of its important proponents. Prerequisite: Two previous courses in philosophy. (UG & G)

PHIL 451 [551] PHILOSOPHY OF RELIGION (3) Exposition of various approaches to the philosophy of religion with an analysis of the major issues on which they differ and agree. Prerequisite: Two previous courses in philosophy or religion. (UG & G)

PHIL 457 [557] COMPARATIVE RELIGION (3) Study of a number of the world's major religious traditions emphasizing specific philosophical and psychological problems encountered therein. Prerequisite: At least one lower-division course in philosophy, religion or history. (UG & G)

PHIL 460-469 WRITING SEMINAR IN PHILOSOPHICAL STUDIES (3) The course concentrates on a specific issue or thinker within the philosophical tradition and on developing the skills necessary to do quality written work in the discipline. Possible topics include: Plato, Aristotle, Hegel, Concepts of Space & Time, Dimensions of Freedom. Prerequisites: ENGL 102 or (104) and two courses in philosophy. (UG)

PHIL 470-479 [570-579] PHILOSOPHICAL PROBLEMS (3) A consideration of one of the perennial interests of philosophy. Prerequisite: Two previous courses in philosophy. (UG & G)

PHIL 495 RESEARCH TUTORIAL IN PHILOSOPHY (3) Directed readings and research leading to a thesis paper under one or more members of the Department. Prerequisites: Senior majors in Philosophy or senior non-majors, submission in advance of an outline of proposed research, permission of proposed director and department chair. (UG)

PHYSICAL EDUCATION (PHEC)

Lower Division

PHEC 010-095 These courses include a variety of sport skills for non-majors. For specific titles, credits, descriptions, and prerequisites, consult Physical Education Department. (UG)

PHEC 111-284 These courses include a variety of professional lab skills for majors as well as team sports for both majors and non-majors. For specific titles, credits, descriptions, and prerequisites, consult Physical Education Department. (UG)

PHEC 196, 296, 396, 496 INDEPENDENT STUDY (.5-3) Designed to permit students to take courses which they cannot arrange within the regular semester schedule. All work will be under the direct supervision of an assigned faculty. May be repeated for a maximum of six credits. Prerequisites: Consent of Department Chair. (UG)

PHEC 235 INDIVIDUALIZED FITNESS (3) Individual fitness and lifestyle will be examined. Fitness components (cardio-respiratory, muscular, flexibility, weight control and psychosocial) will be assessed, evaluated and exercise prescriptions will be formulated for each individual. (UG)

PHEC 245 CAMP LEADERSHIP (2) The role of the camp counselor in organized camping. Emphasis on camp related skills of campcraft, trips, crafts and nature study. Several field trips. (UG)

PHEC 247 OFFICIATING I (2) A study of the art of officiating through lectures, films, discussions, and practical application. Covers the sports of swimming, volleyball, wrestling, football, basketball, and field hockey. Open to majors and non-majors. (UG)

PHEC 248 OFFICIATING II (2) A study of the art of officiating through lectures, films, discussions, and practical application. Covers the sports of track, softball, lacrosse, baseball, tennis and gymnastics. Open to majors and non-majors. (UG)

PHEC 255 ADVANCED INDIVIDUALIZED FITNESS (3) Structure and function of the physiological components of large muscle activity and their relationship to the development and maintenance of fitness. Prerequisite: one beginning level fitness course.

PHEC 269 LIFEGUARD TRAINING (2) An advanced course in lifeguarding techniques for swimming pools and open-water beach areas. Prerequisite: PHEC 261 and HLTH 103 or equivalent. (UG)

PHEC 270-275 SPECIAL TOPICS IN PHYSICAL EDUCATION (1-3) Designed for study of special topics of current interest in physical education, athletics, and their related fields. Objectives and content for each topic are reviewed and approved by the physical education faculty. May be repeated for a maximum of six credits. Prerequisite: Consent of instructor. (UG)

PHEC 279 TECHNIQUES OF TEACHING CREATIVE MOVEMENT

(1) A student-directed approach to the teaching of creative movement to all age levels, pre-school to senior citizen. Includes learning and utilization of basic rhythmic concepts. (UG)

PHEC 281-282 PHYSICAL EDUCATION FOR ELEMENTARY EDUCATION STUDENTS I, II (1, 1)

Designed for the teacher of elementary school children to gain an understanding of and develop a basic ability in the basic skills of children's activities. Provides opportunity to become familiar with methods of learning skills and to appreciate the needs of the individuals in motor learning and analysis of group behavior. Prerequisites to PHEC 324.

PHEC 299 OVERVIEW OF PHYSICAL EDUCATION (2)

The brief history of physical education emphasizing the place of physical education in education today, identification of leaders in the field, the role of professional ethics and standards, professional organization (their purpose and function), and an introduction to professional literature. (UG)

Upper Division**PHEC 301 INTRODUCTION TO RECREATION AND LEISURE (3)**

Recreation and leisure related to individuals, special populations (senior citizens, military, commercial/corporate, correctional institutions, etc.) and society; settings (recreational parks, commercial and private recreation opportunities and ethnic environments). Recreation and leisure concepts and theories, influence on time and work. Out of class experiences required. (UG)

PHEC 302 CURRICULUM IN PHYSICAL EDUCATION (3)

Physical education as a part of general education, aims and content. Principles for development of a sequential physical education curriculum in grades one through twelve. Prerequisite: PHEC 299, PSYC 201. (UG)

PHEC 303 ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION (3)

Designed to provide experiences for the student in administrative problems and procedure from the perspective of the administrator and to also present the learner with knowledge of the administrative responsibilities associated with the physical education teacher. Prerequisites: PHEC 299 and PHEC 324 or 325. (UG)

PHEC 305 OUTDOOR EDUCATION: PHILOSOPHY AND METHODS (3)

Examination of the rationale and basic structure of outdoor education programs. An investigation of effective teaching techniques and procedures for outdoor education. Field experiences are required (students may have to provide their own transportation and equipment). The course will utilize an interdisciplinary approach and be team taught. Prerequisites: Junior or Senior standing and one of the following: PHEC 324, PHEC 325 or Education Methods courses. (UG)

PHEC 307 TEACHING APPRENTICESHIP (.5-1)

A student with a high degree of competency may request to be assigned to assist a faculty master teacher in class instruction and evaluation. This course may be repeated for a maximum of one credit. Prerequisites: Junior-senior status; advanced skill level; approval of chair of Physical Education, Director of Major Program and faculty member concerned. (UG)

PHEC 309 TESTS AND MEASUREMENT IN PHYSICAL EDUCATION (3)

Background for development of measurement programs in physical education; elementary statistical procedures; interpretation of data; selection and administration of tests measuring fitness, motor ability, and sports skills applicable to various grade and age levels. (UG)

PHEC 311 KINESIOLOGY (4)

Mechanical and anatomical analysis of movement in relation to human performance. Three lecture hours and two hours of laboratory experience. Prerequisites: PHYS 201 or CHEM 105, BIOL 213-214. (UG)

PHEC 313 PHYSIOLOGY OF EXERCISE (3)

Application of principles of physiology to large muscle activity, with special emphasis on the interrelations of muscular, nervous, circulatory, and respiratory functions during exercise. Prerequisite: BIOL 213-214. (UG)

PHEC 315 CARE AND PREVENTION OF ATHLETIC INJURIES

(3) Lecture and practical experiences in the study of modern theories and principles of athletic training mechanisms, nature and causes of the most common sports-related injuries. Prerequisites: BIOL 213, First Aid Certificate or 1201.103. (UG)

PHEC 324 TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOL (2-3)

Responsibilities of the elementary school physical education teacher including class organizational procedures, a variety of teaching methods, lesson and unit plan development, and content appropriate for the elementary school child. Course includes observation and teaching experiences with elementary school children at various ages. Prerequisites: PHEC 299, PHEC 283, PHEC 284. (UG)

PHEC 325 TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOL (3)

Responsibilities of the secondary school physical education teacher, including class organizational procedures, variety of teaching methods, lesson and unit planning, and topics resulting from the observation/participation experience in a secondary school. Prerequisites: PHEC 299, laboratory skills in team and individual sports. (UG)

PHEC 331 PRINCIPLES OF COACHING (3)

Designed to develop within each student an educationally sound philosophy of coaching. Emphasis will be on learning and understanding the principles and guidelines of good coaching and the application of the human psychology as it relates to the coach and athletes in their unique relationship. Prerequisite: PSYC 101 or consent of instructor. (UG)

PHEC 335 PRINCIPLES AND TECHNIQUES OF WRAPPING AND TAPING (1)

A laboratory study and application of bandaging and taping for preventive and therapeutic purposes in athletic training. Prerequisite: PHEC 315. (UG)

PHEC 341 CONCEPTS OF MOTOR LEARNING (3)

Designed to study the effects of sensation and perception, reaction time, knowledge of results, retention, transfer, physical and mental practice and motivation on learning and performing motor skills. Prerequisites: PSYC 101 or consent of instructor. (UG)

PHEC 351 PHILOSOPHY: THE SPORT EXPERIENCE (3)

Philosophy of sport and the body, including the major philosophical schools of thought and their implications on physical education. Prerequisites: PHIL 101 or PHIL 111 or consent of instructor. (UG)

PHEC 353 SPORT AND SOCIETY (3)

Explores relationships between sport and social institutions. Prerequisite: SOCI 101. (UG)

PHEC 355 PSYCHOLOGY OF SPORT (3)

Designed to study the psychological correlates of sport. The approach will be one of understanding and application of the literature and research design of sport psychology publications. Prerequisite: PSYC 101. (UG)

PHEC 391 PRACTICUM IN ATHLETIC TRAINING I (1)

Academic and practical experience emphasizing responsibility for the athletic training needs of an assigned sports team; supervision and instruction of student trainer candidates. Prerequisites: PHEC 315, junior or senior standing. Special permit required. (UG)

PHEC 393 A WORLD HISTORY OF SPORT TO 1900 (3)

Explores sport and physical education in context of social, economic and political influences. Focuses upon Greece, Rome, Western Europe to ca. 1900. Not open to students who have completed 0835.291. Prerequisite: PHEC 299 or one history course. (UG)

PHEC 395 PRACTICUM IN SPORT STUDIES (3)

Designed to augment academic studies with relevant experience in potential Sport Studies career environments. May be repeated for a maximum of six credits. Prerequisite: Junior or Senior standing, Special Permit required. S/U Grading. (UG)

PHEC 397 PRACTICUM IN CAMPING OR OUTDOOR EDUCATION (3)

Designed to allow academic and practical experience for students in the camp program or outdoor education area of their choice. The student will participate as a volunteer, aide, or staff member. Seminars will be held to discuss experiences. Students should expect to pay for their transportation, meals, and lodging during the practicum experience. The course will be offered primarily during the minimester and summer sessions. May

be repeated for a maximum of six credits. Prerequisite: PHEC 245 or PHEC 305 or consent of instructor. (UG)

PHEC 399 DIFFERENTIATED STUDENT TEACHING IN PHYSICAL EDUCATION (1 or 2) An additional experience in student teaching in addition to the regular student teaching experience. May be repeated for a maximum of six credits. (UG)

PHEC 403 ORGANIZATION AND ADMINISTRATION OF INTRAMURALS (3) Designed to permit the graduate and undergraduate student to acquire the skills of administration necessary in the development and organization of intramural programs in schools and colleges. (UG)

PHEC 409 [509] STRESS MANAGEMENT, TENSION CONTROL AND HUMAN PERFORMANCE (3) Presents information about the manifestation of stress and systematic programs for tension control. The correlates surrounding progressive muscle relaxation and biofeedback are explored in detail as well as the neurological responses which produce tension responses. Lectures are combined with laboratory experiences in an effort to understand and practice relaxation techniques. Prerequisites: One psychology and/or biological science course. (UG & G)

PHEC 412 THEORY AND ANALYSIS OF GYMNASTICS MOVEMENT (3) Theoretical and practical application of mechanical analysis of movement concepts as related to proper execution of skills in gymnastics. The techniques and methods used in this course are designed to provide the teacher a logical system for presenting gymnastic skills to facilitate learning for the student; to demonstrate that gymnastic skills are logically founded on basic physics or terrestrial mechanics; to present aiding and spotting techniques. (UG)

PHEC 415 [515] ADVANCED CARE AND PREVENTION OF ATHLETIC INJURIES (3) Advanced principles of athletic training including etiology, indications, evaluation and immediate management of selected complex injuries. Prerequisite: PHEC 315 or equivalent, or consent of instructor. (UG & G)

PHEC 416 THERAPEUTIC TECHNIQUES IN SPORTS MEDICINE (4) Analysis and application of a comprehensive rehabilitation program and methods of physical assessment. Prerequisites: PHEC 315, PHEC 415. (UG)

PHEC 417 ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING (3) Analysis and application of organizational skills and administrative structure of the athletic training profession including record keeping, budgeting and a history of athletic training. Prerequisite: PHEC 315. (UG)

PHEC 419 SWIMMING AND POOL MANAGEMENT (3) Teaching methods for all levels of swimming and diving. Modern methods of training the competitive swimmer with emphasis on technique and conditioning of the individual. The organization and administration of swimming pools and clubs with regard to staff, recreation and pool filtration. This is a certifiable course for pool management, approved by the Department of Health, Baltimore County. Prerequisites: PHEC 261 and PHEC 262. (UG)

PHEC 421 PHYSICAL EDUCATION PROGRAM IN THE ELEMENTARY SCHOOLS (3) Current trends and issues in curriculum development, methods and materials and research concerned with elementary school physical education programs. Prerequisite: PHEC 324. (UG)

PHEC 423 [523] ADAPTIVE PHYSICAL EDUCATION (3) Recognition of pupils with physical deviations, and use of special or modified physical education activities. Prerequisites: PHEC 311, BIOL 213-214. (UG & G)

PHEC 427 PERCEPTUAL-MOTOR DEVELOPMENT IN PHYSICAL EDUCATION (3) Provides the teacher of physical education with a basic knowledge of the area of Perceptual-Motor Development. The following areas will be examined: Perceptual-Motor Programs and Theories, Perceptual-Motor Testing Programs, Related Research, Sensory Input and Motor Output. Prerequisite: PHEC 324. (UG)

PHEC 430 [530] MOVEMENT EDUCATION IN THE ELEMENTARY SCHOOL (3) Application of problem solving and individualized methods of teaching of movement for the elementary school child.

Development of programs and materials for teaching creative dance, games and sports. Survey of current literature. (UG & G)

PHEC 435 [535] PROGRAMS IN OUTDOOR EDUCATION (3) Examines the varied programs in Outdoor Education offered within the state, nation, and selected foreign countries. Traditional and innovative programs will be reviewed. Concepts revealed will be contrasted and meeting educational objectives. Several field trips are required. Open to Education majors. Prerequisite: Six hours of physical education, recreation or education. Graduates: Degree in Physical Education. (UG & G)

PHEC 441 [541] THE AMERICAN WOMAN IN SPORT (3) Historical, physiological, psychological, sociological, and philosophical perspectives and societal attitudes toward women who participate in sport. Prerequisites: PSYC 101 or SOCI 101 or WMST 231. (UG & G)

PHEC 451 [551] HISTORY OF AMERICAN SPORT (3) Explores sport in American society from a historical perspective, emphasizing content and methods in sport history. Prerequisites: PHEC 299 or HIST 145 or HIST 146. (UG & G)

PHEC 453 ORGANIZATION AND ADMINISTRATION OF ATHLETICS (3) Designed to aid those persons responsible for organizing and administering intramural and interschool athletic programs. Topics such as organizational patterns, objectives of the programs, controls, game management, records, conduct of tournaments, officials, awards and means of promoting the programs will be considered. Study will be made of competitive as well as informal recreation programs on all educational levels, with special emphasis on the secondary schools. Prerequisite: Upper-division standing in Physical Education or Coaching or Administrative Experience. (UG)

PHEC 470-479 [570-579] SELECTED TOPICS IN PHYSICAL EDUCATION (1-3) Workshop designed for study of special topics of current interest in physical education and athletics. Content varies and will focus on substantive material or operational problems. May be repeated for a maximum of six credits. Prerequisite: Consent of workshop director and/or graduate coordinator. (UG & G)

PHEC 491 PRACTICUM IN ATHLETIC TRAINING II (1) Academic and practical experience emphasizing the development and implementation of rehabilitation programs for injured athletes; instruction of student trainer candidates. One-half of the semester will be spent in an affiliated setting. Prerequisite: 0835.391, 0835.415. Special permit required. (UG)

PHEC 494 [594] TRAVEL STUDY (3) Study of selected physical education programs, practices, or facilities. Study group will be accompanied by TSU Physical Education Department faculty member. Prerequisite: As specified in course outline and consent of instructor. (UG & G)

PHEC 496 [596] INDEPENDENT STUDY (1-3) Course is designed to permit students to take courses which they cannot arrange within the regular semester schedule. All work will be under the direct supervision of an assigned faculty. No more than 3.0 credits may be earned in Independent Study unless the permission of department chair is obtained. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions

PHEC 607 MOTOR DEVELOPMENT OF CHILDREN: INFANCY THROUGH ADOLESCENCE (3)

PHEC 609 PSYCHOLOGY OF MOTOR LEARNING (3)

PHEC 611 SPORT PSYCHOLOGY (3)

PHEC 612 SIGNIFICANT PERIODS IN PHYSICAL EDUCATION (3)

PHEC 613 ANALYSIS OF PHYSIOLOGICAL CONCEPTS (3)

PHEC 614 ANALYSIS OF TEACHING BEHAVIOR IN PHYSICAL EDUCATION (3)

PHEC 621 EDUCATIONAL GYMNASTICS (3)

PHEC 630 MECHANICAL ANALYSIS OF MOVEMENT (3)

- PHEC 633 ADMINISTRATION AND SUPERVISION OF PHYSICAL EDUCATION (3)**
- PHEC 639 CRITICAL ANALYSIS OF CURRENT LITERATURE IN PHYSICAL EDUCATION (3)**
- PHEC 641 EVALUATIVE TECHNIQUES IN PHYSICAL EDUCATION (3)**
- PHEC 645 FACILITIES AND EQUIPMENT FOR PHYSICAL EDUCATION (3)**
- PHEC 651 COMPARATIVE PHYSICAL EDUCATION—CONTEMPORARY AND INTERNATIONAL (3)**
- PHEC 653 CONTEMPORARY PHYSICAL EDUCATION CURRICULUM (3)**
- PHEC 661 OUTDOOR LEISURE (3)**
- PHEC 663 CAMP ADMINISTRATION AND OUTDOOR EDUCATION (3)**
- PHEC 670-679 SELECTED TOPICS IN PHYSICAL EDUCATION (1-3)**
- PHEC 685 RESEARCH SEMINAR (3)**
- PHEC 696 INDEPENDENT STUDY IN PHYSICAL EDUCATION (3)**
- PHEC 697 DIRECTED READINGS IN PHYSICAL EDUCATION (3)**

PHYSICAL SCIENCE (PHSC)

General

Lower Division

- PHSC.101 PHYSICAL SCIENCE I (4)** Principles of classical physics with an emphasis on the application of scientific method. May not be used for the Natural Science Major. (UG)
- PHSC.135 INTRODUCTION TO LASER PHOTOGRAPHY (HOLOGRAPHY) (3)** Geometric interpretation will be used to explain the characteristics of optical holograms: images, redundancy, dynamic range, intermodulation noise, beam ratios, multiple scenes, and white light holograms. Experimental techniques of making holograms will also be covered. Two hours lecture, two hours laboratory. (UG)
- PHSC.151 ENERGY AND POLLUTION (3)** Basic forms of energy: thermal, electrical, nuclear, solar. The relationship between energy and pollution. The problems of energy and pollution. High school algebra is suggested. Two hours of lecture and two hours of laboratory per week. (UG)
- PHSC.161 GENERAL ASTRONOMY I (3)** Science of astronomy; investigations and theories concerning the solar system, galaxies and the universe. Two lecture hours and one two-hour laboratory period. High school algebra suggested. (UG)
- PHSC.195 COURSE RESEARCH IN 100-LEVEL COURSES (1) (UG)**
- PHSC.234 STILL PHOTOGRAPHY (3)** Emphasis will be on the production of photographs, rather than the mastery of many techniques. Camera operation, developing, printing and other topics according to student interest. (UG)
- PHSC.295 COURSE RESEARCH IN 200-LEVEL COURSES (1) (UG)**

Upper Division

- PHSC.303 [503] EARTH-SPACE SCIENCE IN CHILDHOOD EDUCATION (3)** Physical science principles applied in the study of earth and space. Emphasis on experimental and discovery approaches that may be used in the elementary school. Prerequisites: PHSC.101 (UG & G)
- PHSC.361 GENERAL ASTRONOMY II (3)** A study of the stars, stellar systems, galaxies, and cosmology. Emphasis will be placed on the determination of the distance scale and modern trends in astronomy including methods used on space probes. Prerequisite: PHSC.161 or acceptable substitute. (UG)
- PHSC.401 [501] ADVANCED LABORATORY IN PHYSICAL SCIENCE (2)** Exacting laboratory work of an advanced nature under

the guidance of the Physical Science Department staff. Each student will present and defend his work at a seminar. May be repeated for a maximum of six credits. Prerequisite: Consent of instructor. (UG & G)

- PHSC.405 [505] FUNDAMENTAL CONCEPTS IN THE EARTH SCIENCES (3)** Principles of astronomy, geology and related earth sciences. Methods of investigation employed by earth scientists. Observations in the planetarium and field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period. No credit allowed if student has taken PHSC 161 and/or PHSC 121. Prerequisite: PHSC 101 or equivalent. (UG & G)

- PHSC.411 [511] PHYSICAL SCIENCE FOR TEACHERS (3)** An in-service course for teachers in the elementary and/or junior high school designed to develop physical science concepts. Emphasis will be placed on developing these concepts through laboratory work. Prerequisites: Teaching experience. (UG & G)

- PHSC.470-479 [570-579] SPECIAL TOPICS IN PHYSICAL SCIENCE (1-4)** The study of special topics in the areas of physical science. Special topics will be determined by their need for study and relevance to existing courses. (UG & G)

- PHSC.490 INDEPENDENT STUDY IN PHYSICAL SCIENCE (1-4)** Individual and supervised research in selected areas of the Physical Sciences. Topics may be either theoretically or experimentally oriented. May be repeated for a maximum of six credits. Prerequisites: Junior status and one course in PHSC. (UG)

- PHSC.491 DIRECTED READINGS (1-4)** Independent reading in an area selected by the student in consultation with the instructor. May be repeated for a maximum of six credits. Prerequisites: Junior status and one course in PHSC. (UG)

- PHSC.495 [595] COURSE RESEARCH IN 400-LEVEL COURSES (1) (UG & G)**

PHYSICAL SCIENCE (PHSC)

Geology

Lower Division

- PHSC.111 ENVIRONMENTAL GEOLOGY (3)** This course provides a general introduction to geologic principles within the context of the availability and occurrence of economically important earth materials; water movement in and on the earth; and geologic hazards. Not recommended for science or geography majors. Two hours lecture and two hours laboratory per week. Field trips may be required. (UG)
- PHSC.121 PHYSICAL GEOLOGY (4)** Composition and structure of the earth; the internal and external forces acting upon it and the surface features resulting. Laboratory studies of common rocks and minerals, geologic and topographic maps and serial photographs. Field trips required. Three lecture hours and two laboratory hours per week. (UG)
- PHSC.123 HISTORICAL GEOLOGY (3)** The history and development of the continents and ocean basins, and the evolution of life on earth, will be discussed based upon information obtained from the sedimentary rock record. Field trips required. Two hours of lecture and two hours of laboratory per week. (Not open to those who have taken PHSC 171). (UG)

Upper Division

- PHSC.321 [521] STRUCTURAL GEOLOGY (3)** This course involves the identification and analysis of tectonic forms to determine the physical conditions of formation and the context of historical geological events in which they occur. Prerequisites: PHSC 121 and PHYS 211 or equivalent. (UG & G)
- PHSC.322 [522] GEOMORPHOLOGY OF THE EASTERN UNITED STATES (3)** Extent, nature, and geological history of the geomorphic provinces of the Eastern United States. Emphasis on the Middle Atlantic states. Field excursions in the Maryland area. Prerequisite: PHSC 323 (UG & G)
- PHSC.323 GEOMORPHOLOGY (4)** Detailed analysis of the formation, surficial characteristics, and global distribution of the earth's

landforms. Labs emphasize interpretation of landform assemblages through use of topographic maps and aerial photographs. Cannot be taken for credit by students who have received credit for PHSC 222 or GEOG 371 or GEOG 315. Prerequisites: Six hours of geography and/or geology courses, including either GEOG 101 or PHSC 121. (UG)

PHSC.331 [531] MINERALOGY (4) The study of minerals with emphasis on crystallography, crystal chemistry, and chemical-structural classification. Laboratory identification of minerals both in hand specimen and thin section by application of principles of optical mineralogy. Three lecture hours and two hours laboratory. Prerequisites: PHSC 121; CHEM 101. (UG & G)

PHSC.333 [533] PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS (4) Study of the properties and genesis of two major rock groups. Megascopic and microscopic techniques in rock classification. Environments of formation. Three lecture hours and two hours laboratory. Prerequisite: PHSC 331. (UG & G)

PHSC.441 [541] OPTICAL MINERALOGY AND PETROGRAPHY (3) This course includes the theory and application of polarized light and elements of crystallography in the analysis of rock-forming minerals by use of a petrographic microscope. Prerequisite: PHSC 333 (UG & G)

PHSC.443 [543] SEDIMENTOLOGY AND STRATIGRAPHY(4) Processes by which sediments are produced, transported and deposited. Analysis of sediments and sedimentary bodies for the development facies models useful in interpretation of the stratigraphic record. Offered Fall semester alternate years. Two hours of laboratory and two hours of lecture per week. Prerequisites: PHSC 121, CHEM 101 (UG & G)

PHSC.451 PETROLOGY OF SEDIMENTARY ROCKS (3) Macro- and microscopic analysis of sedimentary rocks. Classifications and diagenetic processes. Offered Spring semester alternate years. Prerequisite: PHSC 443. (UG)

PHYSICS (PHYS)

Lower Division

PHYS.100 UNDERSTANDING PHYSICS (3) A descriptive course for the general student which examines and explains ordinary events using a framework provided by the special concepts and methods of physics. Present day physics will be included. Demonstrations and short illustrative experiments will be a part of the course. Three lecture hours. (UG)

PHYS.102 INTRODUCTION TO PHYSICS (3) Designed for students who will later take General Physics and whose background in the physical sciences indicates a need for further preparation. The mathematical expression of basic physical relationships. A placement test is available from the Physics Department. (UG)

PHYS.131 LIGHT AND COLOR (3) Some aspects of light and color and of vision will be examined on a factual and descriptive basis. Predominantly qualitative explorations will be made of the origin of light, of its wave and particular behavior, of the polarization of light, of lasers and holography, of the origin and physical basis of color, and of the physics of vision. This course in liberal arts physics is offered for curious inquirers who have had minimal contact with physics. Three lecture hours. (UG)

PHYS.141 PHYSICS OF SOUND AND MUSIC (3) Study of sound and its production by various instruments, the human voice included. Physical interpretations of concepts such as noise, pitch, mechanical and acoustic waves and oscillations, loudness, harmonics and timbre, scales and temperament, etc. (UG)

PHYS.185 INTRODUCTORY HONORS SEMINAR IN PHYSICS (1) This seminar is intended for freshmen and sophomores who have demonstrated exceptional ability in the sciences and will involve them directly with current ideas and research in physics. Classical physics, quantum physics, relativity, and the new astronomy will be covered. Prerequisite: Permission of the Physics Department. (UG)

PHYS.201 GENERAL PHYSICS B (5) One semester General Physics with special emphasis on motion including kinematics and dy-

namics of linear and angular motion. (Not open to those who have taken 1902.101).(UG)

PHYS.203 TOPICS IN PHYSICS FOR BIOLOGY MAJORS (5) Topics will be selected from these areas: 1) mechanical and thermal properties of matter; 2) forms of energy and conversion; 3) optics; 4) waves; 5) electromagnetics. Students who may wish to seek advanced degrees in biology, dentistry, medicine or related fields should enroll in PHYS.211-212 or 241, 242, 243. Prerequisite: MATH.115 or good standing in high school algebra and trigonometry. (UG)

PHYS.211-212 GENERAL PHYSICS I, II (4, 4) For Arts and Sciences, Biology, and Natural Science Majors: mechanics, heat, light, electricity, magnetism and a brief introduction to modern physics. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH.115, or good standing in high school algebra and trigonometry. (UG)

PHYS.231 INTRODUCTION TO ASTROPHYSICS (3) Celestial mechanics, stellar interiors, stellar evolution and cosmology. Prerequisite: One year of high school physics or PHYS.212 or PHYS.242 at least concurrently. (UG)

PHYS.241, 242, 243 GENERAL PHYSICS I, II, III (4,4,3) For Chemistry, Mathematics, and Physics majors: Mechanics, and the conservation laws, gravitation, electricity, magnetism, DC and AC circuits, waves, introduction to physical optics. Three lecture hours and one three hour lab per week. Prerequisite: MATH.273 or concurrently. (UG)

PHYS.295-296 RESEARCH PROBLEMS IN PHYSICS (1-3) Individual project in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, the student must write a formal research paper on the work done. Students may register for this more than once but at different levels. Prerequisite: Permission of the instructor who will direct the proposed work. (UG)

Upper Division

PHYS.303 HISTORY OF SCIENCE (3) This course will present a general overview of the development of scientific knowledge from ancient to modern times. It will examine how our modern scientific worldview has been shaped by major periods of scientific development, particularly in the sixteenth and seventeenth centuries involving primarily astronomy and physics, and in the nineteenth and twentieth including geology, biology, and psychology as well. Attention will be given to the relations between science and culture, religion, technology, and public policy. Prerequisite: One course in the biology, chemistry, or physics department. (UG)

PHYS.304 [504] HISTORY AND PHILOSOPHY OF PHYSICS (2) The works of Sarton, Cohen, Singer and Dampier on the history and significance of physical concepts. The philosophical concepts of Bridgeman, Russell, Heisenberg and other contemporaries interpreted in the historical development. Two lecture hours. (UG & G)

PHYS.307 [507] INTRODUCTORY MATHEMATICAL PHYSICS (3) As the mathematical maturity of the students will allow, selected topics will be examined such as the generalized expressions for forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Three lecture hours. Prerequisite: PHYS 242, MATH 373 or concurrently. (UG & G)

PHYS.309 [509] MATHEMATICS OF MOTION (4) This course, intended to meet the needs of mathematics major students, illustrates the application of mathematics to major physical phenomena: the particle and wave nature of motion. The methods developed are applicable to both the macrocosm and microcosm. Prerequisites: COSC.165, MATH.273 and MATH.274. (UG & G)

PHYS.311 [511] MODERN PHYSICS (4) Special relativity, the quantum theory, atomic structure and spectra, and nuclear structure and reactions are the main topics covered by the course. Other topics which may be covered involve molecular, solid state, and high energy physics. Four lecture hours. Prerequisite: MATH.274, PHYS.212 or PHYS.242. (UG & G)

- PHYS.335 [533] BASIC ELECTRONICS (4)** Circuit components, characteristics of semi-conductors, electrical measurements, method of circuit analysis, electronic devices. Three lecture hours and one three-hour laboratory period. Prerequisite: PHYS 212 or PHYS 242 or consent of instructor. (UG & G)
- PHYS.337 [534] DIGITAL ELECTRONICS (4)** Subjects covered will be basic concepts of digital electronics such as: gates, logic modules, truth tables, digital codes, sequential systems, semi-conductor memories, decade counters, etc. The laboratory program is designed to give students firsthand experience on the material covered in lecture using integrated circuits and LED display systems. Two hours lecture, three hours laboratory. Prerequisite: MATH.115 or equivalent. (UG & G)
- PHYS.341-342 [541-542] INTERMEDIATE PHYSICS LABORATORY I, II (3, 3)** First Semester: The measurement of several fundamental physical constants. Exploration of classical and modern research methods: Lasers, holography, optical and nuclear spectroscopy. Second Semester: Several advanced experiments, a research project. Familiarization with machine shop procedure, vacuum and other experimental techniques. Five laboratory hours. Prerequisite: PHYS 311 or concurrently. (Lab II: Prerequisite: PHYS 341) (UG & G)
- PHYS.351 [550] MECHANICS (3)** Systems of coordinates and transformations, kinematics, Newtonian dynamics, linear systems and oscillators, central force motion, generalized coordinates, and Lagrange's equations. Optional topics: Hamiltonian's principle, perturbation techniques, non-linear behavior, coupled oscillations. Four lecture hours. Prerequisites: PHYS.243 or PHYS.212, MATH.274. (UG & G)
- PHYS.352 [552] THERMODYNAMICS AND KINETIC THEORY (3)** Principles and laws of classical thermodynamics applied to simple irreversible processes, including chemical, elastic, electric and magnetic phenomena; thermodynamic functions and Maxwell's relations; the conservation equations in elementary kinetic theory; fluctuations; and irreversible transfer effects. This course may be taken concurrently with PHYS 243 or by permission. Three lecture hours. Prerequisites: PHYS.212 or PHYS.243, MATH.274. (UG & G)
- PHYS.354 [554] ELECTRICITY AND MAGNETISM I (3)** Electrostatics, magnetostatics, and electromagnetic radiation. Among the topics normally covered are the Divergence Theorem and Stokes' Theorem, electrostatics in free space and in dielectric materials, the Biot-Savart Law, the magnetic vector potential, inductance and electromotance, magnetic materials, Maxwell's Equations in free space and in materials. Other topics sometimes covered include wave guides, Snell's Laws, radiation from antennas, radiation from accelerated point charges. Three lecture hours. Prerequisite: MATH.274, PHYS.212 or PHYS.242. (Not open to those who have taken 1905.305) (UG & G)
- PHYS.361 OPTICS FUNDAMENTALS (4)** Geometric, wave and quantum optics: Lenses and mirrors, lens aberrations and design, optical instruments, interference diffraction, polarization, absorption and scattering, lasers, holography, and the dual nature of light. Three lecture hours and one three-hour laboratory each week. Prerequisites: PHYS.243, COSC.165, and PHYS.341 (or permission of the instructor). (UG)
- PHYS.370-379 SELECTED TOPICS IN CONTEMPORARY ASTROPHYSICS (3)** Variable content including the origin of the elements, and radio, microwave, and UV instruments and sources. Prerequisite: PHYS.231 or PHSC.161 plus one year of college general physics. (UG)
- PHYS.395-396 [595-596] RESEARCH PROBLEMS IN PHYSICS (1-3)** Individual project in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, the student must write a formal research paper on the work done. Students may register for this more than once but at different levels. Prerequisite: Permission of the instructor who will direct the proposed work. (UG & G)
- PHYS.411 GRAVITATION, RELATIVITY, AND COSMOLOGY (3)** Development of Einstein's general theory of relativity and its application to astrophysics: theory of gravity, relativistic effects of massive stars, blackholes, gravity waves, cosmology. Given alternate years. (UG)
- PHYS.421 FUNDAMENTAL PARTICLES (3)** Experimental and theoretical physics of particles and fields: particle production and detection, relativistic kinematics, symmetry, conservation laws, fundamental interactions, phenomenology and contemporary models. Prerequisites: PHYS.307 and PHYS.311. (UG)
- PHYS.435 [535] ELECTRONICS (3)** Principles of transistors with emphasis on their design and construction and an introduction to logic circuits. Two lecture hours and one two-hour laboratory. Prerequisite: PHYS.335. (UG & G)
- PHYS.437 [537] INTRODUCTION TO MICROPROCESSORBASED DIGITAL SYSTEMS (3)** An introductory course on basic microcomputer concepts. Topics covered include basic structure and organization of microcomputers, digital logic design, assembly language programming, memory elements, and applications. Hardware oriented experiments will be conducted providing practical experience in interfacing the microcomputer to a variety of instruments and input-output devices. Two hours lecture and two hours laboratory. Prerequisite: PHYS.337. (UG & G)
- PHYS.445 [545] LASERS & HOLOGRAPHY (3)** The wave front reconstructions, laser, theory, the properties and making of holograms, and the applications of lasers and holography will be covered. Special projects will be assigned to students depending upon their individual theoretical and experimental background. Prerequisite: PHYS.243 or consent of instructor. (UG & G)
- PHYS.451 [551] MECHANICS II (3)** Continuation of PHYS 351. Inertia and stress tensors; continuum mechanics; rotation of a rigid body; theory of small vibrations; basic postulates of the special theory of relativity; relativistic dynamics; lattice vibrations. Other special topics of advanced mechanics. Prerequisites: PHYS.351 and PHYS.307. (UG & G)
- PHYS.453 [553] PHYSICAL OPTICS (3)** Electromagnetic theory of light, wave solutions, interference, diffraction, scattering, radiation from coherent and incoherent sources, elementary theory of masers and lasers. Three lecture hours. Prerequisite: PHYS.355 or consent of instructor. (UG & G)
- PHYS.454 ELECTRICITY AND MAGNETISM II (3)** Solutions of Maxwell's equations in complex media; wave guides, boundary value problems (Snell's and Fresnel's laws), Hertzian oscillator; introductory electrodynamics. Prerequisite: PHYS.354. (UG)
- PHYS.455 [555] INTRODUCTORY QUANTUM MECHANICS (3)** The Schroedinger equation, states of one particle in one dimension, potential barrier problems in one dimension, the harmonic oscillator, system of particles in one dimension, motion in three dimensions, angular momentum, spin, application to atomic physics. Prerequisites: PHYS.351, MATH.373. (UG & G)
- PHYS.456 [556] INTRODUCTION TO STATISTICAL MECHANICS (3)** Distribution functions, microcanonical, canonical and grand canonical ensembles, the partition function and thermodynamics relations. Fermi-Dirac and Bose-Einstein statistics, some simple models and applications, the Maxwell-Boltzman transport equation and the hydrodynamic equation, transport coefficients. Three lecture hours. Prerequisite: PHYS.455. (UG & G)
- PHYS.457 SOLID STATE PHYSICS (3)** Crystal structure, wave propagation in periodic structures, the Fermi gas, energy bands, magnetism, are presented as a central theoretical core for the study of the solid state. Some of the basic models, concepts, and manifest properties of solids are also included. Prerequisites: PHYS.311, PHYS.351, and PHYS.355. (UG)
- PHYS.459 [559] NUCLEAR PHYSICS (3)** A lecture and problem course dealing at the introductory level concerning experimental and theoretical method for the study of nuclear structure. Topics to be covered include: properties of nuclei, electromagnetic transition and beta decay; nuclear models, nuclear reactions, and two body interactions. Given in alternate years. Prerequisite: PHYS.311; PHYS.307 or consent of instructor. (UG & G)
- PHYS.461 ELECTRO-OPTICS (4)** Optical sources and detectors, electronics, controls and modulators. Radiant energy and power measurements, laser instrumentation, fiber optics, photo-active

devices. Three lecture hours and one three-hour laboratory each week. Prerequisites: PHYS.361, PHYS.335, and PHYS.341-342 (or permission of the instructor). (UG)

PHYS.485-486 [585-586] PHYSICS SEMINAR I, II (1, 1) Students participate in colloquia on topics of current interest in physics research under guidance of instructor. One lecture hour. Prerequisite: Senior standing or consent of instructor. (UG & G)

PHYS.490 [590] INDEPENDENT STUDY IN PHYSICS (1-4) Prerequisite: At least junior status and one course in the Physics Department. May be repeated for a maximum of six credits. (UG & G)

PHYS.491 [591] DIRECTED READINGS (1-4) Prerequisites: At least junior status and one course in the Physics Department. May be repeated for a maximum of six credits. (UG & G)

PHYS.495-496 RESEARCH PROBLEMS IN PHYSICS (1-3) Individual projects in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, the student must write a formal research paper on the work done. Students may register for this more than once but at different levels. Prerequisite: Permission of the instructor who will direct the proposed work. (UG)

PHYS.499 HONORS THESIS IN PHYSICS (1-4) Writing of an honors thesis based on independent research done under the direction of a staff member. Prerequisites: Consent of instructor and open only to advanced honors candidates. May be repeated for a maximum of six credits. (UG)

POLITICAL SCIENCE (POSC)

Lower Division

POSC 101 INTRODUCTION TO POLITICAL SCIENCE (3) The origins of modern governments. The nature of constitutions and constitutionalism. A definition and interpretation of politics. (UG)

POSC 103 AMERICAN NATIONAL GOVERNMENT (3) Structure and functions of the government of the United States and the problems involved in the extension of the scope of democratic government in our contemporary life. (UG)

POSC 107 INTRODUCTION TO INTERNATIONAL RELATIONS (3) An introductory examination of principles of legal, political, and social relations between nations. (UG)

POSC 137 INTRODUCTION TO COMPARATIVE POLITICS (3) The study of politics is introduced through an examination of different political systems. The activities of parties, movements, and pressure groups are examined in the context of different social, political, and economic frameworks. (UG)

POSC 207 STATE GOVERNMENT (3) Historical background, state constitutions, and the legislative, executive and judicial branches of government. Problems of state administration and federal-state relations. Prerequisite: POSC 103 or consent of the instructor. (UG)

POSC 209 INTRODUCTION TO LAW (3) The legal process in the United States. This course is primarily designed for the liberal arts student. Prerequisite: Sophomore standing and one Introductory Political Science course. (UG)

POSC 212 HONORS SEMINAR IN POLITICAL SCIENCE (3) Not for Political Science Seminar Credit. Small group discussion focusing on a specialized topic not available in other electives. Variation in content. May be repeated once under a different topic. Prerequisite: Special Permit required and Admission to Honors College (UG)

Upper Division

POSC 303 [503] THEORY OF INTERNATIONAL POLITICS (3) The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restraints upon the struggle for power. Prerequisite: HIST 242 or POSC 107 or consent of instructor. (UG & G)

POSC 305 [505] URBAN GOVERNMENT AND POLITICS (3) The political history of American cities from the eighteenth century

through the recent reform movement. City charters, home rule, types of executives, political machines. The metropolitan area. Prerequisite: POSC 103. (UG & G)

POSC 307 [507] CONTEMPORARY INTERNATIONAL POLITICS (3) An examination of the conduct of international relations by the Western, the Communist, and the non-aligned blocs in the Post-World War period. Prerequisite: POSC 107 or POSC 303, or consent of instructor. (UG & G)

POSC 333 POLITICS AND RELIGION IN GLOBAL PERSPECTIVES (3) Church-State conflicts in a global context emphasizing Poland, Nicaragua, Nigeria, Iran, Israel, and the United States. Prerequisite: POSC 101, 107, or any course in History of the Soviet Union or Eastern Europe, or consent of instructor. (UG)

POSC 337 [508] COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3) An examination of the problems of modernization and stable constitutional rule in England, France, Italy, and Germany. Prerequisite: POSC 101 or POSC 137 or consent of instructor. (UG & G)

POSC 338 [538] COMPARATIVE GOVERNMENTS OF THE SOVIET UNION AND EASTERN EUROPE (3) Constitutional and legal processes of Russia, Japan, China and other Eastern powers. Prerequisite: POSC 101 or POSC 137 or consent of instructor. (UG & G)

POSC 339 [509] COMPARATIVE POLITICAL SYSTEMS (3) The course will attempt to bring together the analytical concepts and methodological techniques that may be applied to the study of political systems in a comparative sense. Prerequisite: POSC 103 or POSC 137 or consent of instructor. (UG & G)

POSC 341 [511] AFRICAN GOVERNMENT AND POLITICS (3) An examination of the rise of African nationalism and the emergence of new states in Africa. Attention is directed to the influence of colonial rule and traditional political institutions on the development of party politics, patterns of government, and Pan-African ideas. A trend towards the military rule, political problems of the independent Africa, and the efforts of each country to build a strong and viable political system are emphasized. Prerequisite: Any Political Science course or consent of instructor. (UG & G)

POSC 351 [551] THE GOVERNMENT AND POLITICS OF LATIN AMERICA (3) An examination of the informal and formal rules of the political "game" in Latin America with an emphasis on four types of political systems found in contemporary Latin America: democratic reformist, revolutionary, populist, and military authoritarian. Prerequisite: POSC 101 or POSC 137 or consent of instructor. (UG & G)

POSC 355 [512] THE LATIN AMERICAN POLICY OF THE UNITED STATES (3) An analysis of the Latin American Policy of the United States from the Monroe Doctrine to the present. Emphasis will be on historical, political, economic, and security factors in the ebb and flow of inter-American relations. Prerequisite: POSC 101 or POSC 137 or consent of instructor. (UG & G)

POSC 359 [559] POLITICAL AND SOCIAL ASPECTS OF REVOLUTION (3) Nature and function of violence and revolution in modern social systems. Prerequisite: POSC 101 or POSC 137 or consent of instructor. (UG & G)

POSC 361 [513] POLITICAL BEHAVIOR (3) The purpose of this course is to introduce the student to the substantive theory and methodology of behavioral analysis. Topics include voting behavior, elite behavior, and an analysis of types of political conflict. Prerequisite: POSC 101 or consent of instructor. (UG & G)

POSC 375 [514] PUBLIC ADMINISTRATION (3) Administration as a central element of contemporary society, with special reference to the problems of government organization, control, personnel, finance, and public relations. Prerequisite: POSC 103. (UG & G)

POSC 381 [515] THE PRESIDENCY (3) A discussion of the origin of the office, the selection of the President and policymaking in the executive branch. Prerequisite: POSC 103. (UG & G)

POSC 383 [516] CONGRESS (3) An investigation of the relations of Congress with the other branches of government and with the political parties and interest groups. The course also examines the

- relationships between a member of Congress and his constituency as well as the internal dynamics of Congress. Prerequisite: POSC 103. (UG & G)
- POSC 417 [517] AMERICAN POLITICAL PARTIES (3)** Origin and development of the American two-party system. The activities of pressure groups and organizations, and their effects upon the party system. Prerequisite: POSC 103 or consent of instructor. (UG & G)
- POSC 418 [518] CONSTITUTIONAL LAW (3)** A study of the Constitution of the United States based on leading judicial decisions interpreting the Constitution and statutes from 1789 to the present. Prerequisite: POSC 103. (UG & G)
- POSC 4xx CONSTITUTIONAL LAW II (3)** The second half of a two-part sequence covering the major issues of Constitutional Law. This course will focus primarily on the activities of Supreme Court in the area of civil rights and civil liberties. Prerequisites: POSC 101 and POSC 418. (UG & G)
- POSC 427 [527] POLITICAL THEORY I (3)** Political thought in the West from the Greeks to the end of the sixteenth century. Prerequisite: POSC 101 or consent of instructor. (UG & G)
- POSC 428 [528] POLITICAL THEORY II (3)** Political philosophers and their writings since the sixteenth century. Attention given to the conflict of ideologies in the twentieth century. Prerequisite: POSC 101 or consent of instructor. (UG & G)
- POSC 430 [530] POLITICAL IDEAS OF SOCIALISM AND COMMUNISM (3)** This course deals with selected topics in the political theory of socialism and communism including socialism and the ancient regimes, socialism and political organization, Russian, Leninist and Stalinist theory, and socialist ideas in the post cold war period. Prerequisite: POSC 428. (UG & G)
- POSC 432 [532] UNITED STATES-SOVIET RELATIONS (3)** Diplomatic, cultural, and economic relations between the U.S.S.R. and the U.S. Emphasis on the period since 1933 with a careful study of the effects of the Second World War upon the balance of power. Prerequisite: Any 100 level political science course or consent of instructor. (UG & G)
- POSC 433 DOMESTIC POLITICS OF THE SOVIET UNION AND EASTERN EUROPE (3)** Analysis of selected policies of the Soviet Union and socialist Eastern Europe emphasizing health, education, welfare, and politics. Prerequisites: POSC 101, 107, or 137, or consent of instructor. (UG)
- POSC 435 [535] AFRICA IN WORLD POLITICS (3)** The role of African nations in the nuclear age, and their efforts to achieve unity. Prerequisite: POSC 341 or consent of instructor. (UG & G)
- POSC 437 [537] CASTRO AND THE CUBAN REVOLUTION (3)** A discussion of the factors that led up to the Castro Revolution in 1959 and the subsequent impact of the creation of the first socialist state on the Western Hemisphere. Prerequisite: POSC 355 or POSC 351, or consent of instructor. (UG & G)
- POSC 439 [539] UNITED STATES FOREIGN POLICY IN SOUTH-EAST ASIA (3)** American foreign policy in Southeast Asia in the Post World War II period. Prerequisite: POSC 107 or POSC 303 or consent of instructor. (UG & G)
- POSC 441 [541] CONTEMPORARY UNITED STATES-WESTERN EUROPEAN RELATIONS (3)** Emphasis will be on NATO, the European Economic Community, and the Anglo-American efforts to create an Atlantic partnership between Europe and the United States. Prerequisite: POSC.103 or POSC.137, or consent of instructor. (UG & G)
- POSC 445 [545] UNITED STATES FOREIGN POLICY IN SOUTH ASIA (3)** A discussion of American foreign policy in South Asia mainly since 1945. Emphasis will be on India and Pakistan. Prerequisite: POSC 107 or POSC 303 or HIST 109, or consent of instructor. (UG & G)
- POSC 450 [550] GROUP POLITICS AND PUBLIC OPINION (3)** The role of pressure groups and public opinion in the American political system. Prerequisite: Junior standing and nine hours of political science, or consent of instructor. (UG & G)
- POSC 451 POLITICS AND RELIGION IN THE U.S.A. (3)** Constitutional separation of politics and religion in contrast with social reality. The 'religionization' of politics through the effort of religious groups. Prerequisite: POSC 101 or any course in U.S. History, Religion, or consent of instructor. (UG)
- POSC 455-456 [555-556] INTERNATIONAL LAW AND ORGANIZATION I, II (3, 3)** An examination of the theories and the development of international law up to the present. The character of the modern state system, the role of international organizations, and international law and resort to force. Prerequisites: POSC 303 and HIST 242 or consent of instructor. (UG & G)
- POSC 457 [557] USE OF FORCE IN INTERNATIONAL LAW (3)** The course will examine the use of force as an instrument of Foreign Policy by various states; and the survey of legal restraints on the use of force throughout history. Prerequisite: POSC.303, POSC.455 or consent of instructor. (UG & G)
- POSC 461 [561] RESEARCH METHODS IN POLITICAL BEHAVIOR (3)** The major emphasis in this course will be on the use of quantitative techniques in political research. Topics include survey research, the use of computers, and statistical analysis. Prerequisite: Any course at 100 level. (UG & G)
- POSC 463 [563] SCOPE AND METHODS OF POLITICAL SCIENCE (3)** The nature of political inquiry, approaches to the study of politics and government, and empirical methods of research will be the core areas of this course. Prerequisite: A minimum of nine credits in Political Science including at least one upper-division course. (UG & G)
- POSC 465 [565] EDITORIAL WORK—TOWSON STATE JOURNAL OF INTERNATIONAL AFFAIRS (1)** (One per semester—four semester limit.) Members of the Editorial Board of The Towson State Journal of International Affairs prepare the issues of that Journal under the supervision of the faculty advisors. Admission by consent of the instructor. Graded under S/U procedure. (UG & G)
- POSC 470-479 [570-579] SPECIAL TOPICS IN POLITICAL SCIENCE (3)** An examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100 level POSC course or consent of instructor. (UG & G)
- POSC 482 [582] SEMINAR IN POLITICAL SCIENCE (3)** Various methods and techniques of research in political science, culminating in the preparation of a seminar paper. Prerequisite: Eighteen semester hours in political science, or consent of instructor. (UG & G)
- POSC 483 [583] SEMINAR: POLITICS AND THE NEWS MEDIA (3)** Focuses on the relationship between the government and the news media in terms of that which exists and what it should be. Considers such topics as White House press operations, the First Amendment, government efforts to control the news, and efforts by the media at self-regulation. Prerequisite: POSC 103. (UG & G)
- POSC 484 [584] SEMINAR: POLITICS AND THE BUDGETARY PROCESS (3)** An analysis of the budgetary process. The budget is considered as an instrument of fiscal policy and government planning. Budget preparation and classification with special emphasis given to program and performance budgeting. Problems in budget authorization, execution, and control. Prerequisite: POSC 375 or consent of instructor. (UG & G)
- POSC 485 [585] DEMOCRATIC THEORY SEMINAR (3)** This course attempts to trace the source of Democratic Theory to their 16th century origins and to analyze the variants to that theory which have been proposed since that time. Prerequisite: POSC 428. (UG & G)
- POSC 486 SEMINAR: JUSTICE AND THE LAW (3)** Central legal, political and moral questions concerning justice and the law, discussion on justice as an achievable goal in human society, particularly in the modern democratic state. Prerequisite: POSC 101, 209 (401) (UG)
- POSC 490 [590] INDEPENDENT STUDY (3)** Individual and supervised study in selected areas of political science. Admission by consent of instructor. (UG & G)

POSC 491 [591] SEMINAR IN CONTEMPORARY UNITED STATES FOREIGN POLICY (3) An examination of the nature, basis, and instruments of American foreign policy in the contemporary age. The formulation, control, and execution of American foreign policy will also be noted. Prerequisites: POSC 303 and HIST 146 or consent of instructor. (UG & G)

POSC 493 [593] PRACTICUM IN POLITICS (3-9) This course is designed to familiarize students with practical working of political and government institutions. The flexibility in time and credit arrangements will allow a variety of political practice (or internships) in which students can combine observation of "politics in action" with discussions and generalization of the observed. Prerequisites: Junior standing, major in political science, and consent of the department chair. Graded under S/U procedure. (UG & G)

PORTUGUESE (PORT)

Lower Division

PORT 101-102 PORTUGUESE ELEMENTS I, II (3-4, 3-4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation. (UG)

PORT 201-202 PORTUGUESE INTERMEDIATE I, II (3-4, 3-4) Review of grammar, conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: PORT 101-102 or equivalent. (UG)

PSYCHOLOGY (PSYC)

Lower Division

PSYC 101 GENERAL PSYCHOLOGY (3) Methods and principles. Attention to: measurement, experimentation, sensation, remembering, personality, adjustment, development, and individual differences. Prerequisite: None. (UG)

PSYC 102 HONORS GENERAL PSYCHOLOGY (3) Methods and principles. Attention to: measurement and experimentation, psychobiology, sensation and perception, learning and memory, motivation and emotion, personality, adjustment, abnormality and psychotherapy, development and individual differences. Honors College Course. Special permit only. (UG)

PSYC 111 BEHAVIORAL STATISTICS (4) Distributions and graphs, notation, levels of measurement, percentiles, measures of central tendency and variability, principles of probability, the normal curve, standard scores, sampling theory, hypothesis testing, significance of differences, correlation and prediction, computation on computer terminals, Chi square, Non-parametrics, One-Way analysis of variance. (UG)

PSYC 201 EDUCATIONAL PSYCHOLOGY (3) The learning process and related concepts; human development; individual differences; measurement and evaluation; personality and adjustment. Prerequisite: PSYC 101 or 102. (UG)

PSYC 203 HUMAN DEVELOPMENT (3) A study of research and theories related to the overall development of the human throughout the life cycle with emphasis on the interaction of physiological, personality, and social components of development. Prerequisite: PSYC 101 or 102. (UG)

PSYC 204 HONORS HUMAN DEVELOPMENT (3) An in-depth study of research and theories related to the overall development of the human throughout the lifespan, with an emphasis on the interaction of physical, psychological, and social components. Honors College Course. Prerequisite: PSYC 101 or 102. Spring. (UG)

PSYC 205 INTRODUCTION TO THE HELPING RELATIONSHIP (3) Current concepts of the helping relationship and an exploration of the conditions that facilitate its effectiveness. Prerequisites: PSYC 101 or 102 and psychology major or minor planning to enter one of the helping professions, or consent of the department. Not open to students who have completed 2001.425. (UG)

PSYC 206 APPLIED PSYCHOLOGY (3) Psychologists' contributions to education, medicine, law, mental health and business. Appli-

cation to problems in these areas. Lectures and field trips. Prerequisite: PSYC 101 or 102. (UG)

PSYC 209 CONSUMER BEHAVIOR (3) Basic psychological concepts concerning consumer behavior such as the cognition, perception, learning, attitudes, cognitive dissonance, risk-taking, motivation, and personality of the buyer. Emphasis on the interrelation of economics and sociocultural factors on consumer decisionmaking, including recent research findings and marketing applications. Prerequisite: PSYC 101 or 102. (UG)

PSYC 211 CHILD PSYCHOLOGY (3) An introduction to and general survey of theories and research in child behavior. Development of major psychological functions with emphasis on application of principles in teaching and parenting. Psychology majors and minors will not receive credit for this course; majors and minors should take PSYC 203. Prerequisite: PSYC 101 or 102. (UG)

PSYC 230 ADJUSTMENT AND GROWTH (3) A survey of problems encountered in the course of normal human development, intimate relationships, emotional challenges, important life choices, and developing a satisfying personal style of life. Clarification of opinions, attitudes and values in relationship to these issues. Psychology majors and minors will not receive credit for this course. Pre-requisite: PSYC 101 or 102. Spring, Fall. (UG)

PSYC 261 EXPERIMENTAL PSYCHOLOGY (4) The experimental method and its application to recent problems in psychological research; introduction to experimental design and inference; animal and human learning, perception, social, personality, maturation. Three hours lecture, two hours laboratory per week. Prerequisites: PSYC 101 or 102 and PSYC 111. Fall, Spring. (UG)

Upper Division

PSYC 305 [510] PSYCHOLOGY OF LEARNING (3) Analysis of selected problems in both human and animal learning including reinforcement, punishment, verbal learning and verbal behavior. Prerequisite: PSYC 261. Fall, Spring and Summer. (UG & G)

PSYC 309 [512] BEHAVIORAL PHARMACOLOGY (3) A systematic investigation of the effects of drugs on behavior. Drug classification, historical aspects, methodological considerations, uses in treatment, drug abuse, and related topics will be considered. Prerequisite: PSYC 261 or consent of instructor. Fall, Spring. (UG & G)

PSYC 311 [513] BEHAVIOR MODIFICATION I (3) Examination and application of the basic principles of the experimental analysis of behavior, with an emphasis on the applied aspects of this modern discipline to schools, jobs, interpersonal relations and self-control. Prerequisite: 12 hours of Psychology, including PSYC 261. Fall. (UG & G)

PSYC 315 [515] MOTIVATION (3) Interaction between physiological, neurological, and pharmacological aspects of motivation with environmental influences such as culture, learning and social dynamics. Issues in human motivation and emotion which will be emphasized are aggression, sex, achievement (competence) and cognitive-social influences. Prerequisite: Six hours of PSYC. (PSYC 203 and Junior standing recommended). Fall, Spring. (UG & G)

PSYC 317 [517] SENSATION AND PERCEPTION (3) A systematic investigation on the basic senses such as vision, audition, taste, smell, and touch will be undertaken. The organization of sensory input will also be emphasized. Both human and non-human data will be presented. Prerequisite: PSYC 261. Spring. (UG & G)

PSYC 325 [524] SOCIAL PSYCHOLOGY (3) The structure and function of groups. Recent advances in sociology, anthropology and psychiatry as related to psychology. Prerequisite: Six hours of PSYC. Fall & Spring. (UG & G)

PSYC 327 INDUSTRIAL PSYCHOLOGY (3) Theories, psychological concepts, and research applied to industrial and organizational settings. Prerequisite: PSYC 101 or 102. Fall and Spring. (UG)

PSYC 330 [530] PSYCHOLOGY OF INDIVIDUAL DIFFERENCES (3) Individual differences in human traits and characteristics; methodology, basic principles, and major findings in research.

Prerequisites: PSYC 101 or 102 and PSYC 111. Alternate Springs. (UG & G)

PSYC 341 [540] ENVIRONMENTAL PSYCHOLOGY (3) The relationship between the physical and social environment and behavior, i.e., places, spaces, and people. How man/woman construes, interprets, comprehends, feels about the environment, and how the environment functions as a reflection of human needs and values. Topics include environmental design, crowding, privacy, human territoriality, personal space. Prerequisite: PSYC 101 or 102. Fall, Spring. (UG & G)

PSYC 350 [550] PERSONALITY (3) Theoretical and practical approaches to the study of personality. Introduction to psycho-dynamics and to methods and materials of assessment. Prerequisite: Six hours PSYC. Fall, Spring. (UG & G)

PSYC 361 [542] ABNORMAL PSYCHOLOGY (3) Disordered personal reactions to life. Organic and functional phenomena plus therapeutic techniques. Prerequisite: Nine hours PSYC including PSYC 203 or consent of instructor. Fall, Spring. (UG & G)

PSYC 381 [581] READINGS IN PSYCHOLOGY (1-2) A survey of relevant research literature under the guidance of a staff member who will direct the students' research. This course may be taken a maximum of 2 times for major credit purposes. Prerequisite: PSYC.261 or consent of instructor. Fall, Spring. (UG & G)

PSYC 383 PROCTORING IN PSYCHOLOGY (3-6) Students serve as teaching apprentices or proctors in a course which they have already completed (such as General Psychology), and which they must relearn to 100% mastery. Students will manage the learning and evaluate individual progress of the members of the class assigned to them. The experience includes guidance, support, and motivation of the assigned students, all in a supervised situation. Only three credits may be earned in one semester. May be repeated for a maximum of six credits. For six (6) credits, the student must serve as a proctor for two separate courses. Prerequisites: Successful completion of five or more Psychology courses or: general, educational and child, or adolescent psychology and principles of education and be a junior or a senior plus permission of instructor. Fall, Spring, Summer. Grading of S/U option only. (UG)

PSYC 403 [503] PSYCHOLOGY OF INFANCY AND CHILDHOOD (3) An advanced course reviewing historical and current changes in the areas of infancy and childhood. Emotional, cognitive and individual development will be covered in depth. Emphasis is placed on critical analysis of research theory construction and methods. Not open to students who have taken ECED 413. Prerequisite: PSYC 203. Spring. (UG & G)

PSYC 404 [504] ADOLESCENT PSYCHOLOGY (3) Physical, emotional, intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: PSYC 203. Fall, Spring. (UG & G)

PSYC 405 [505] THE PSYCHOLOGY OF AGING (3) A study of the changes in learning, emotions, personality and social behavior and the impact of culture and attitude on the aging process. Prerequisite: Six hours of PSYC including PSYC 203. Students should be aware of how to read and understand psychology, journals and how psychological research is conducted. Fall, Evening in alternate years. (UG & G)

PSYC 409 [509] ORGANIZATIONAL PSYCHOLOGY (3) Human relations in the work setting. Topics will include theory and research concerning leadership, job satisfaction and motivation, organizational communication, group dynamics, and organizational change. Prerequisite: Six hours of PSYC. Fall. (UG & G)

PSYC 411 [511] TESTS AND MEASUREMENTS (3) Psychological and educational testing and evaluation. The construction, administration, interpretation and use of the various evaluative devices of aptitude and achievement. Prerequisites: PSYC 101 or 102 and PSYC 111. Fall, Spring, Summer. (UG & G)

PSYC 421 [521] APPLICATIONS OF BEHAVIORAL PRINCIPLES TO FAMILY AND CLASSROOM ENVIRONMENTS (3) Practical application of operant techniques to child management and family functioning. Course will deal with behavioral analysis, be-

havior modification programs and family contracting both at school and at home, with emphasis on learning basic technical skills. Prerequisite: PSYC 211. Fall, Spring. (UG & G)

PSYC 427 [527] INTRODUCTION TO INTERVIEWING TECHNIQUES I (3) An introduction to interviewing with the examination of real interviews with children in difficulty. The theory and methods of delivery of helping services via the interview. Prerequisites: Minimum of two months interviewing experience and consent of instructor. Grading of S/U option only. (UG & G)

PSYC 428 [528] INTERVIEWING TECHNIQUES II (3) This is a continuation of PSYC 427. The course explores more deeply the unique relationship of the interviewer to the client. There is practical experience with critiquing of interviews of students. Prerequisite: PSYC 427. Grading of S/U option only. (UG & G)

PSYC 429 [529] INTRODUCTION TO THE COUNSELING OF MINORITY GROUPS (3) An introduction to the study of the counseling function with emphasis upon minority groups needs, counselor attitudes and techniques. Prerequisite: PSYC 101 or 102 and psychology major or minor planning to enter one of the helping professions or graduate student in Guidance and Counseling or consent of department coordinator. (UG & G)

PSYC 430 SYSTEMS AND TECHNIQUES OF COUNSELING PRACTICE (3) Review and application of current theoretical approaches to the helping relationship. Prerequisites: PSYC 205 and either PSYC 230 or PSYC 361 or PSYC 640. (UG)

PSYC 431 [531] GROUP DYNAMICS (3) Intensive study of group interactions with emphasis upon reciprocal group influence of behavior. Prerequisite: PSYC 325 or consent of instructor. Fall. (UG & G)

PSYC 433 GROUP PSYCHOTHERAPY PRACTICUM (3) Supervised experience in use of group intervention techniques. Students will counsel groups of troubled adolescents. Supervision will focus on both group and individual dynamics. Prerequisite: PSYC 431, admission to Clinical Concentration Program. (UG)

PSYC 435 [535] SUPERVISED FIELD EXPERIENCE (3-6) Placement in a community service agency to familiarize the student with its current practices. Supervised client contact will be provided. May be repeated for a maximum of 12 credits but only 6 credits can apply to the major; the other 6 credits will be used as general electives. Prerequisites: 23 hours of psychology and consent of instructor. (UG & G)

PSYC 439 [539] THE INITIAL INTERVIEW (3) Clinical observation and practicum experience. Focus on interviewer and interviewee dimensions and relationship with patients. Use of tapes, seminars and individual supervision. Prerequisite: PSYC 205, and admission to Clinical Concentration Program. Fall. (UG & G)

PSYC 445 [545] PEER COUNSELING (3) A study of peer counseling functions with emphasis on training students in verbal and non-verbal communications, listening skills, values clarification, referral techniques, confidentiality, and decision-making skills. Includes research of problems, issues and trends. Prerequisite: PSYC 205 or Education majors. (UG & G)

PSYC 447 [547] SEX DIFFERENCES: PSYCHOLOGICAL PERSPECTIVES (3) Sex role/personality development is examined from various perspectives: social, cultural, evolutionary, and biological. Changing conceptions with regard to women, their roles and self-concepts, are emphasized within the overall context of sex differences and similarities in behavior. Prerequisite: PSYC 203 or permission of instructor. (UG & G)

PSYC 451 [551] INTRODUCTION TO THE EXCEPTIONAL CHILD (3) Children with atypical, physical, mental, social and emotional development, including the physically handicapped, the mentally retarded, the gifted, and emotionally disturbed children. Prerequisite: PSYC 201 or PSYC 211. Fall. (UG & G)

PSYC 453 [553] ISSUES IN MENTAL HEALTH INTERVENTION (2) Readings, lectures, and seminars relating to psychological emergencies and the modes of intervention during psychological crises. Prerequisite: PSYC 205, PSYC 454 concurrent, admission to Clinical Concentration Program. (UG & G)

PSYC 454 PRACTICUM IN PSYCHOTHERAPY (4-12) Techniques of psychotherapeutic intervention. Students will see patients in psychotherapy under intensive supervision. Seminars and individualized readings. May be repeated for a maximum of 12 credits. Prerequisite: PSYC 453 concurrent and admission to Clinical Concentration Program. (UG)

PSYC 457 GENDER IDENTITY IN TRANSITION (3) Psychological consequences of changing definitions of femininity, masculinity, and personhood will be examined using recent theories of gender identity formation. Concepts such as androgyny, sex-role transcendence and future shock will be related to psychological adaptation to social change. Prerequisites: PSYC 315 or PSYC 447 or consent of instructor. (UG)

PSYC 460 [560] ETHOLOGY AND COMPARATIVE PSYCHOLOGY (3) A survey of the major behavioral adaptations in non-human and human species, within the framework of evolutionary theory, ethology, and experimental psychology. Three hours of lecture a week. Prerequisite: PSYC 261 or consent of instructor. Fall. (UG & G)

PSYC 461 [561] COGNITIVE PSYCHOLOGY (3) This course will deal with the nature of the cognitive processes, an analysis of the organization of cognitive abilities, and problems in cognition. Theoretical viewpoints will be explored, including those of Piaget, J. P. Guilford, Ausubel, Lewin, Skinner. A comparison among theories will be made as they relate to the thinking processes. Prerequisite: PSYC 203, PSYC 211 or with consent of instructor. Spring. (UG & G)

PSYC 462 [562] LABORATORY IN ETHOLOGY AND COMPARATIVE PSYCHOLOGY (2) This course is a laboratory experience to accompany Ethology and Comparative Psychology (PSYC 460). Students will be trained in basic observational and recording techniques used in studying behavior from a comparative-ethological vantagepoint. A supervised project will also be undertaken by students. Can be taken concurrently or subsequently to PSYC 460. Prerequisite: May be taken concurrently with or subsequent to PSYC 460, or consent of instructor. Spring. (UG & G)

PSYC 465 [565] PHYSIOLOGICAL PSYCHOLOGY (3) This course is concerned with an introduction to the physiological bases of behavior. The topics to be considered are basic neuroanatomy and neurophysiology, sensory and motor systems, motivational systems, and "higher order" behavioral systems. Three hours of lecture per week. Prerequisite: PSYC 261 or consent of instructor. Fall, Spring. (UG & G)

PSYC 466 [566] LABORATORY IN PHYSIOLOGICAL PSYCHOLOGY (2) This course is intended to expand upon PSYC 465. Students will receive experience in dissection of the sheep brain, small animal surgical and histological techniques, and small animal behavioral testing techniques. This course may be taken either concurrently with or subsequently to PSYC 465. Spring. Prerequisite: May be taken concurrently with or subsequent to PSYC 465, or consent of instructor. (UG & G)

PSYC 467 [567] ADULT PSYCHOLOGY (3) A study of adult behavior between the ages of 18 and 60. The developmental stages of young adulthood, adulthood, and middle age will be discussed along with topics pertinent to each of the levels such as leaving and becoming emancipated from the family; the transition and adjustment to marriage and work; and bridging the gap between ideals and actual fulfillment. Prerequisite: PSYC 203. (UG & G)

PSYC 470-479 [570-579] SPECIAL TOPICS (1-3) Survey and critical evaluation of modern literature pertaining to selected problems in Psychology. Prerequisite: Consent of instructor. (UG & G)

PSYC 480 [580] SYSTEMS OF PSYCHOLOGY (3) Schools of psychology with their theoretical and methodological approaches. Prerequisites: At least a junior psychology major and consent. Alternate Springs. (UG & G)

PSYC 485 [585] EXPERIMENTAL DESIGN (4) Design and analysis—Analysis of variance (completely randomized design, repeated measurement designs, etc.), multiple comparisons, nonparametrics, general problems related to sampling, experimental effects, etc. Prerequisite: PSYC 111 or consent of instructor. Fall, Spring. (UG & G)

PSYC 491 [591] INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3) An opportunity for especially qualified students to undertake research problems according to their interest and training under the direction of a staff member. May be repeated for a maximum of 12 credits but only 6 credits can apply to the major; the other 6 credits will be used as general electives. Prerequisite: PSYC 261 and consent of instructor. Fall, Spring. (UG & G)

PSYC 499 SENIOR THESIS IN PSYCHOLOGY (4) Independent research on special problems in Psychology or closely related fields. Prerequisites: PSYC 261, PSYC 485, Honors approval. Fall, Spring. (UG)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

PSYC 601 SEXUAL COUNSELING (3)

PSYC 603 HUMAN LEARNING (3)

PSYC 605 COUNSELING TECHNIQUES (3)

PSYC 607 APPLIED THEORIES OF COUNSELING (3)

PSYC 609 COUNSELING PSYCHOLOGY—PRE-PRACTICUM (3)

PSYC 611 DEVELOPMENTAL PSYCHOLOGY (3)

PSYC 613 COMMUNITY MENTAL HEALTH COUNSELING (3)

PSYC 615 INTRODUCTION TO RESEARCH METHODS IN COUNSELING (3)

PSYC 620 PSYCHODIAGNOSTIC EVALUATION I: INTELLIGENCE (3)

PSYC 621 ADVANCED EDUCATIONAL PSYCHOLOGY (3)

PSYC 625 BEHAVIORAL TECHNIQUES (3)

PSYC 631 ADVANCED ABNORMAL PSYCHOLOGY (3)

PSYC 635 INTRODUCTION TO CLINICAL HYPNOSIS (3)

PSYC 637 COUNSELING STRATEGIES FOR DRUG AND ALCOHOL ABUSE (3)

PSYC 640 MENTAL HYGIENE IN EDUCATION (3)

PSYC 641 MENTAL HEALTH ISSUES IN THE WORKPLACE (3)

PSYC 645 COPING STRATEGIES IN THE CLASSROOM (3)

PSYC 650 DIAGNOSTIC TECHNIQUES IN EDUCATION (3)

PSYC 651 TECHNIQUES OF GROUP INTERVENTION (3)

PSYC 653 RESEARCH ISSUES IN SCHOOL/CLINICAL PSYCHOLOGY (3)

PSYC 655 LEARNING DISABILITIES I: ASSESSMENT (3)

PSYC 657 LEARNING DISABILITIES II: REMEDIATION (3)

PSYC 661 FOUNDATIONS OF REHABILITATION COUNSELING (3)

PSYC 663 SYSTEMS OF PSYCHOTHERAPY (3)

PSYC 665 PSYCHOTHERAPY AND BEHAVIOR CHANGE I (3)

PSYC 666 PSYCHOTHERAPY AND BEHAVIOR CHANGE II (3)

PSYC 667 PSYCHO-SOCIAL ASPECTS OF DISABILITY (3)

PSYC 668 MEDICAL ASPECTS OF DISABILITY (3)

PSYC 669 THE PSYCHOLOGICAL ASPECTS OF HEARING LOSS (3)

PSYC 670 REFERRAL RESOURCES FOR THE SCHOOL AGE CHILD (3)

PSYC 673 ADVANCED EXPERIMENTAL PSYCHOLOGY I (4)

PSYC 674 ADVANCED EXPERIMENTAL PSYCHOLOGY II (4)

PSYC 675 PROSEMINAR I (3)

PSYC 676 PROSEMINAR II (3)

PSYC 677 LEARNING (3)

PSYC 679 SPECIAL TOPICS SEMINAR: (VARIABLE TOPIC) (1-3)

PSYC 681 ADVANCED HISTORY AND SYSTEMS OF PSYCHOLOGY (3)

- PSYC 684 COLLEGE TEACHING SEMINAR (3)
 PSYC 685 COLLEGE TEACHING PRACTICUM (3)
 PSYC 687 ADVANCED EXPERIMENTAL DESIGN I (3)
 PSYC 688 ADVANCED EXPERIMENTAL DESIGN II (3)
 PSYC 689 MULTIVARIATE METHODS (3)
 PSYC 693 INTERNSHIP IN COUNSELING (3)
 PSYC 697 PRACTICUM IN CLINICAL PSYCHOLOGY (3)
 PSYC 703 PRE-SCHOOL ASSESSMENT (3)
 PSYC 705 PRINCIPLES OF GUIDANCE (3)
 PSYC 706 INTRODUCTION TO CAREER DEVELOPMENT (3)
 PSYC 707 INFORMATION SERVICE IN GUIDANCE AND COUNSELING (3)
 PSYC 708 MEDIA IN CAREER EDUCATION (3)
 PSYC 711 ANALYSIS OF THE INDIVIDUAL (3)
 PSYC 715 ADVANCED SEMINAR IN PSYCHOTHERAPY (3)
 PSYC 717 THEORIES OF FAMILY COUNSELING (3)
 PSYC 718 TECHNIQUES OF FAMILY COUNSELING (3)
 PSYC 719 COUNSELING THE ELDERLY (3)
 PSYC 721 GROUP COUNSELING (3)
 PSYC 723 GROUP COUNSELING PRACTICUM (3)
 PSYC 727 USE OF TESTS IN COUNSELING (3)
 PSYC 730 COUNSELING THE ELEMENTARY SCHOOL CHILD (3)
 PSYC 731 ADMINISTRATIVE AND CURRICULAR ASPECTS OF SCHOOL PSYCHOLOGY (3)
 PSYC 733 ASSESSMENT AND TREATMENT OF EXCEPTIONAL CHILDREN (3)
 PSYC 745 PRACTICUM IN COUNSELING PSYCHOLOGY (6)
 PSYC 752 INTERNSHIP IN SCHOOL/CLINICAL PSYCHOLOGY (3)
 PSYC 761 PSYCHODIAGNOSTICS II: PERSONALITY EVALUATION (3)
 PSYC 763 PSYCHODIAGNOSTICS III: CONSULTATION (3)
 PSYC 765 PERSONALITY ASSESSMENT IN CLINICAL PSYCHOLOGY (3)
 PSYC 766 ADVANCED PERSONALITY ASSESSMENT IN CLINICAL PSYCHOLOGY
 PSYC 771 PRACTICUM IN PSYCHODIAGNOSTIC EVALUATION (3)
 PSYC 773 PRACTICUM IN INTERVENTION TECHNIQUES (3)
 PSYC 790 SEMINAR IN PROFESSIONAL PSYCHOLOGY (3)
 PSYC 797 INTERNSHIP IN CLINICAL PSYCHOLOGY (3)
 PSYC 898 THESIS (3 or 6)
 PSYC 899 THESIS CONTINUUM (1)

RUSSIAN (RUSS)

Lower Division

- RUSS 101-102 RUSSIAN ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation, elementary conversation; composition and translation. (UG)
 RUSS 201-202 RUSSIAN INTERMEDIATE I, II (4, 4) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: RUSS 101-102 or equivalent. (UG)

SAFETY EDUCATION (DRED) (See General Education Department) Upper Division

- DRED 430 [530] PRINCIPLES OF ACCIDENT PREVENTION (3)
 Includes a survey of the history and philosophy of the safety education movement, need for safety education, aims and objectives, accident causation and prevention, and the role of education in eliminating environmental hazards and reducing avoidable human error. (UG & G)
 DRED 431 [531] HIGHWAY TRANSPORTATION SYSTEM AND DRIVER TASK ANALYSIS (3) History and philosophy of automobile and highway safety engineering, U.S. and International traffic controls, traffic laws and regulations, critical analysis of traffic accidents and causation, and attitude factors. (UG & G)
 DRED 445 [545] CURRICULUM DEVELOPMENT IN DRIVER EDUCATION (3) History of curriculum development in driver education; principles; philosophies; objectives; current practices, evaluation techniques; laboratory experience; and field study. Prerequisite: Six credits in approved Driver Education Courses or approval of Director. (UG & G)

SCIENCE EDUCATION (SCIE)

Upper Division

- SCIE 371 [551] TEACHING SCIENCE IN EARLY CHILDHOOD (2)
 The course is designed to familiarize the student with appropriate methods and materials in science for the young child. Emphasis will be on interdisciplinary approach. Prerequisite: ECED 341 or concurrently. (UG & G)
 SCIE 376 [576] TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3) Significance of science for the elementary school child; its contribution toward his development; criteria for selecting science experiences for children. Open only to students in the student teaching block. (UG & G)
 SCIE 380 [580] TEACHING SCIENCE IN THE SECONDARY SCHOOL (3) Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials. Must be taken the semester prior to student teaching. (UG & G)
 SCIE 421 FIELD COURSE IN SECONDARY SCIENCE TEACHING METHODS (2) Analysis and evaluation of current materials and techniques in secondary science teaching. To be taken concurrently with student teaching at off-campus center. Prerequisite: SCIE 380 and must be student teaching. (UG)
 SCIE 470-475 [570-575] SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY SCHOOL TEACHER I-VI (1, 2, or 3) Three different modules of science instruction will be offered each semester for teachers of primary and intermediate grades. The course will emphasize instructional strategies in both the processes and content of the science. A student may elect to take 1, 2, or all 3 modules for 1, 2, or 3 credit hours respectively. All students must attend the first class meeting for course orientation. Thereafter, each module will meet once a week for four weeks. Each meeting will consist of approximately four hours laboratory work. Prerequisite: Teaching experience in the elementary schools. (UG & G)
 SCIE 488 [588] AEROSPACE EDUCATION—WORKSHOP (3) In cooperation with CAP, USAF, NASA. A fund of general knowledge about aviation and space exploration. Teaching materials, resources, and field experiences. Usually a weekend at Florida's Cape Kennedy Space Center and other day-long tours TBA. For K-12 teachers, supervisors, administrators, and students of teaching. Lab fee \$15.00 (including travel). Three weeks, summers only. (UG & G)

Graduate Division

See TSU *Graduate School Catalog* for course descriptions.

- SCIE 685 SEMINAR IN ELEMENTARY SCHOOL SCIENCE (3)

SECONDARY EDUCATION (SCED)**Upper Division**

SCED 301 FIELD EXPERIENCES IN SECONDARY EDUCATION (3) Experiences in observing and studying school activities directly related to classroom instruction and pupil learning; observing and analyzing teacher roles, student roles and instructional environment. Emphasis is placed on direct experience in a variety of school settings. Prerequisite: PSYC 201. (UG)

SCED 319 SURVEY OF EDUCATIONAL PROGRAMS (3) Survey of educational programs and services K-12. Combines theoretical aspects of ELED 311 The Child in the Elementary School Curriculum and SCED 341 Principles of Secondary Education. Open only to those students in art, dance, music, physical education, health, or media specialists, whose majors lead directly to certification in elementary and secondary education. Prerequisite: PSYC 201 or concurrently, and written permission, chair Department of Secondary Education. (UG)

SCED 341 PRINCIPLES OF SECONDARY EDUCATION (3 or 4) Philosophy and purposes of secondary education; nature of secondary education programs; principles of teaching and learning; basic techniques in instruction. Field experiences are required if taken for four credits in day program. (This necessitates travel time and at least two hours of assistant teaching weekly.) To be taken the semester prior to the methods course. Students in approved certification programs leading to the bachelor's degree must enroll for four credits. Prerequisites: Junior standing, PSYC 201 (or taken concurrently), and written permission of the chair of Secondary Education. (UG)

SCED 345 EXCEPTIONAL LEARNERS IN SECONDARY SCHOOLS (3) An introduction to basic concepts and issues— exploration of literature about exceptional learners, particularly learning disabled and gifted, with focus on implications for classroom teachers. Fulfills advanced writing requirement. Prerequisite: ENGL 102 or ENGL 190 (104). (UG)

Methods courses in each subject are not necessarily offered every semester. It is the responsibility of the student to meet with his or her secondary education advisor to determine when he or she will take the teaching methods course.

SCED 353 TEACHING MODERN FOREIGN LANGUAGE IN THE SECONDARY SCHOOL (3) Aims and purposes of foreign language instruction; current curricular trends, including the importance of modern language teaching practices. Open to juniors or seniors, who plan to teach foreign language, with consent of instructor. Prerequisite: SCED 341 and written permission from Chair, Secondary Education (UG)

SCED 355 TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL (3) Objectives, curriculum, materials and instructional procedures in the teaching of social studies. Open to junior and/or senior students prior to student teaching block and to others with equivalent backgrounds and objectives. Prerequisite: SCED 341 and written permission from Chair, Secondary Education. (UG)

SCED 357 TEACHING ENGLISH IN THE SECONDARY SCHOOL (3) Language arts as taught in secondary schools. Open only to junior and/or senior students prior to student teaching and to others with equivalent backgrounds and objectives with consent of instructor. Prerequisite: SCED 341 and written permission from Chair, Secondary Education (UG)

Student Teaching

The following student teaching courses provide practical experiences in observation, participation, and student teaching in public school classrooms under the guidance of master teachers and a university supervisor. Prerequisites: PSYC 201, SCED 319 or SCED 341, SCED 460, SPED 301, and an appropriate methods course and written permission from the Center for Applied Skills in Education (C.A.S.E.). Dual Certification students receive permission from their major department. All secondary majors and credit count certification students

will student teach at both the middle school and high school level the same semester.

SCED 380 STUDENT TEACHING IN SECONDARY EDUCATION—ART (6) (UG)

SCED 381 STUDENT TEACHING IN SECONDARY EDUCATION—BIOLOGY (12) (UG)

SCED 382 STUDENT TEACHING IN SECONDARY EDUCATION—DANCE (6) (UG)

SCED 383 STUDENT TEACHING IN SECONDARY EDUCATION—ENGLISH (12) (UG)

SCED 384 STUDENT TEACHING IN SECONDARY EDUCATION—FRENCH (12) (UG)

SCED 385 STUDENT TEACHING IN SECONDARY EDUCATION GEOGRAPHY (12) (UG)

SCED 386 STUDENT TEACHING IN SECONDARY EDUCATION GERMAN (12) (UG)

SCED 387 STUDENT TEACHING IN SECONDARY EDUCATION—SCHOOL & COMMUNITY HEALTH (8) (UG)

SCED 388 STUDENT TEACHING IN SECONDARY EDUCATION—SCHOOL HEALTH (14) (UG)

SCED 389 STUDENT TEACHING IN SECONDARY EDUCATION—HISTORY (12) (UG)

SCED 390 STUDENT TEACHING IN SECONDARY EDUCATION—MATHEMATICS (12) (UG)

SCED 391 STUDENT TEACHING IN SECONDARY EDUCATION—MUSIC (6) (UG)

SCED 392 STUDENT TEACHING IN SECONDARY EDUCATION—PHYSICAL EDUCATION (6-7) (UG)

SCED 393 STUDENT TEACHING IN SECONDARY EDUCATION—SCIENCE (12) (UG)

SCED 394 STUDENT TEACHING IN SECONDARY EDUCATION—SPANISH (12) (UG)

SCED 396 STUDENT TEACHING IN SECONDARY EDUCATION—SOCIAL SCIENCE (12) (UG)

SCED 397 STUDENT TEACHING IN SECONDARY EDUCATION—SOCIO-ECON BUSINESS SUBJECTS (12) (UG)

SCED 399 DIFFERENTIATED STUDENT TEACHING—SECONDARY (1-8) Student teaching experiences in addition to those in SCED 398 or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the student's area director; written permission, Center for Applied Skills in Education (C.A.S.E.). (UG)

SCED 401 ANALYZING STUDENT TEACHING (3) Analysis of and development of solutions for problems in pupil behavior, curriculum, evaluation and instructional procedures. Secondary teaching philosophies and strategies based upon identified needs determined as a result of the student teaching experience will be explored in depth. Open to students concurrent with or following student teaching. (UG)

SCED 405 FIELD EXPERIENCES IN JUVENILE CORRECTIONAL INSTITUTIONS (3) Observation and participation within social and educational programs in juvenile correctional institutions. Provides valuable experiences for education, sociology, psychology, and law enforcement students. Prerequisite: Consent of instructor. (UG & G)

SCED 441 METHODS OF TEACHING SOCIO-ECONOMIC BUSINESS SUBJECTS IN SECONDARY SCHOOLS (3) Selection of appropriate content, methods and materials and evaluation techniques for teaching socio-economic subjects in secondary schools. Planning approaches for developing curricula in General Business. Business law, consumer economic, business mathematics, bookkeeping, and economic geography. Prerequisites: PSYC 201 and SCED 341 and written permission from the Chair, Secondary Education. (UG)

SCED 457 [557] METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE (3) Teaching teachers methods of teaching

English as a second language. Attention is given to the use of visuals, contrastive analysis, drill techniques, and other methods and resources. Prerequisite: Teaching experience or consent of instructor. (UG & G)

SCED 458 [558] USING WRITING AS A LEARNING TOOL IN THE SECONDARY SCHOOL (3) Strategies for using writing to learn content in all disciplines; examination of the writing process — diagnosis, pre-writing, drafting, revision, evaluation, and publication. Prerequisite: SCED 341 or SCED 319 or consent of instructor. (UG & G)

SCED 460 [560] TEACHING READING IN THE SECONDARY SCHOOL (3) General developmental reading skills; identification, diagnosis and remediation of reading problems; comprehension, vocabulary building, work-study skills. Prerequisites: SCED 341 or concurrently; written permission, Chair, Department of Secondary Education. (UG & G)

SCED 461 [561] TEACHING READING IN THE SECONDARY CONTENT AREAS (3) Teaching reading study skills leading to reading efficiency and problem solving associated with specific subject matter content. Prerequisite: SCED 460. (UG & G)

SCED 463 [563] DEVELOPMENTAL READING FOR THE EARLY ADOLESCENT (3) Methods of designing and teaching developmental reading programs for the middle or junior high school student. Attention to the following: providing for individual differences, teaching students to read critically, developing and extending reading interests. Prerequisite: SCED 460 or equivalent reading methods course. (UG & G)

SCED 470-489 [570-589] SPECIAL TOPICS IN SECONDARY EDUCATION: (Topic to be named) (1-3) In-depth study of a selected topic in Secondary or Adult Education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Graduate credit only with approval of the graduate coordinator. Each topic may be taken as a separate course. (UG & G)

SCED 494 [594] TRAVEL AND STUDY IN SECONDARY EDUCATION (1-6) Study abroad of educational facilities, programs or practices, or selected projects in education topics. By special arrangement with program chair and sponsoring instructors. Consent of graduate program coordinator required for graduate degree credit. (UG & G)

SCED 495 [595] INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Consent of Chair of Secondary Education. Graduate credit by consent of Graduate Program Coordinator only. (UG & G)

SCED 496 [596] DIRECTED READING IN SECONDARY EDUCATION (1-4) Independent reading in selected areas of Secondary Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the department to qualified students. Prerequisite: Obtain consent of chair of Secondary Education. Graduate credit by consent of Graduate Program Coordinator only. (UG & G)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

SCED 603 TEACHING WRITING ACROSS THE CURRICULUM (3)

SCED 605 THEORY, RESEARCH AND PRACTICE IN TEACHING COMPOSITION (6)

SCED 611 LEARNING DISABILITIES OF ADOLESCENTS AND ADULTS (3)

SCED 621 INDIVIDUALIZING LEARNING IN THE SECONDARY SCHOOL (3)

SCED 623 THE MIDDLE SCHOOL (3)

SCED 625 TEACHING IN THE MIDDLE SCHOOL (3)

SCED 627 HUMAN RESOURCES DEVELOPMENT (3)

SCED 631 THE COMMUNITY COLLEGE (3)

SCED 633 CURRICULUM AND INSTRUCTION IN THE COMMUNITY COLLEGE (3)

SCED 635 DISCIPLINE AND CLASSROOM MANAGEMENT IN SECONDARY SCHOOLS (3)

SCED 637 MAINSTREAMING FOR THE CLASSROOM TEACHER (3)

SCED 643 THE ADMINISTRATION OF THE SECONDARY SCHOOL (3)

SCED 647 THE TEACHING PROCESS: SECONDARY EDUCATION (3)

SCED 649 TEACHING GIFTED STUDENTS IN THE SECONDARY SCHOOL (3)

SCED 651 TECHNIQUES FOR TEACHING SPECIAL NEEDS ADOLESCENTS AND ADULTS (3)

SCED 670-674 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)

SCED 683 SEMINAR IN SECONDARY SUPERVISION (3)

SCED 695 INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4)

SCED 696 DIRECTED READING IN SECONDARY EDUCATION (1-4)

SCED 731 FIELD EXPERIENCES IN ADOLESCENT AND ADULT LEARNING DISABILITIES (3)

SCED 741 CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL (3)

SCED 751 SEMINAR IN MIDDLE SCHOOL CURRICULUM (3)

SCED 753 SEMINAR IN SECONDARY SCHOOL CURRICULUM (3)

SCED 770-774 SPECIAL TOPICS IN SECONDARY EDUCATION: (Topic to be named) (1-3)

SCED 779 SEMINAR IN SECONDARY SCHOOL SOCIAL STUDIES (3)

SCED 781 SEMINAR IN SECONDARY AND ADULT EDUCATION (3)

SCED 898 MASTER'S THESIS IN SECONDARY EDUCATION (3)

SCED 899 THESIS CONTINUUM (1)

SOCIOLOGY (SOCI)

Lower Division

SOCI 101 INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior. (UG)

SOCI 102 HONORS INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior. Honors College Course. Special Permit Only. (UG)

SOCI 197 HONORS SEMINAR IN COMMUNITY POWER ANALYSIS (3) A multi-disciplinary investigation in applied social science of the major components necessary to successful metropolitan problem solving. Prerequisites: Admissions to the Honors College Program. (UG)

SOCI 241 BLACKS IN AMERICA: MYTHS AND REALITY (3) Focus on prevailing myths regarding black society, the reasons why such myths have developed, and the reality which contradicts these myths. Prerequisite: SOCI 101. (UG)

Upper Division

SOCI 301 THE FAMILY (3) The family as the basic group in human societies; its development; its relation to other social institutions; the family in modern industrial societies. Prerequisite: SOCI 101. (UG)

SOCI 311 [511] INDIVIDUAL AND SOCIETY (3) A social psychological approach to the inter-relationships of the individual and his/her social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 101. (UG & G)

SOCI 313 INTRODUCTION TO SOCIAL PSYCHOLOGY (3) A general introduction to the inter-relationships between social organization and individual human behavior. Examination of social factors in the emergence of consciousness, self, personality and interpersonal relations. Prerequisite: SOCI 101. (UG)

SOCI 315 [515] COMMUNICATIONS AND SOCIAL ORDER (3) Role of communications in social control; coercion, manipulation and enlightenment in society through primary and secondary communication. Prerequisite: SOCI 101. (UG & G)

SOCI 317 SOCIOLOGY OF SPORT (3) This course will focus on a critical examination of the role of sport in society. The student will be presented with material which transcends the still prevalent stereotypes and myths of sport and suggest the significance of cooperation/competition, social organization, racial and sexual issues. Prerequisite: SOCI 101. (UG)

SOCI 322 [522] SOCIOLOGY OF WAR AND PEACE (3) A broad ranging examination of a variety of issues related to war and peace from a sociological perspective . . . the nature and causes of war, behavior in battle, mechanisms of securing peace, the relationship between armed forces and society. Prerequisite: SOCI 101. (UG & G)

SOCI 323 [523] SOCIAL CHANGE (3) A sociological analysis of the sources, processes and consequences of social change. Prerequisite: SOCI 101. (UG & G)

SOCI 325 [525] CROWDS, MOBS, AND RIOTS (3) Study of unorganized and organized groups and their impact on society: crowds, mobs, riots and other processes of disruptive and constructive change. Prerequisite: SOCI 101. (UG & G)

SOCI 327 [527] URBAN SOCIOLOGY (3) Survey of the theoretical and sociological conceptualizations of modern western industrial cities. Prerequisite: SOCI 101. (UG & G)

SOCI 329 [529] DEMOGRAPHY (3) Social, economic, and political problems related to changes, distribution and movement population; analysis of contemporary population trends in the U.S. and the world. Prerequisite: SOCI 101. (UG & G)

SOCI 330 VOCATIONAL REHABILITATION (3) Sociological perspective on the problem of fitting the worker disadvantaged for any reason into the occupational structure of the industrialized society. Includes treatment of the physically and educationally handicapped as well as those whose delinquency, family, minority or other experiences inhibit their capacity for normal entry into and pursuit of occupations with stability and mobility. Prerequisite: SOCI 101. (UG)

SOCI 331 [531] ORGANIZATIONS (3) Structure and functioning of large scale organizations; formal and informal aspects of bureaucracies in business, government, politics, education and other institutional spheres of society. Prerequisite: SOCI 101. (UG & G)

SOCI 332 [532] SOCIOLOGY OF OCCUPATIONS AND PROFESSIONS (3) Sociological literature on career choice and training patterns of occupational success and failure, professionalization process as it affects all occupations, role conflicts, regulation of behavior by the occupation and profession itself. Prerequisite: SOCI 101. (UG & G)

SOCI 333 [533] POLITICAL SOCIOLOGY (3) Contemporary relevance of the fundamental ideas regarding the relationship of the social and political systems; the significance of social and political democratization; class struggles and revolution; the influence of government bureaucracy. Prerequisite: SOCI 101. (UG & G)

SOCI 334 [534] INDUSTRIAL SOCIOLOGY (3) Sociological analysis of corporate and labor organization: internal organization; relationship to each other; impact on the workers in them; relationship to government and the total society. Treats issues such as changing managerial techniques, worker discontent and conditions for organizational and technological innovation. Prerequisite: SOCI 101. (UG & G)

SOCI 335 [535] MEDICAL SOCIOLOGY (3) A study of social and cultural perspectives on illness; demographic trends; the health professions; institutions for the delivery of health care services. Prerequisite: SOCI 101. (UG & G)

SOCI 339 [539] COMMUNITY ORGANIZATION (3) The organization of the community as a vehicle for identifying and meeting human needs; processes and techniques of community planning and development, traditional and contemporary. Prerequisite: SOCI 101. (UG & G)

SOCI 341 [541] CLASS, STATUS AND POWER (3) An examination of major theories and significant research on socially structured inequality in modern and traditional societies. Prerequisite: SOCI 101. (UG & G)

SOCI 343 [543] MINORITY GROUPS (3) An examination of inter-group life as an aspect of society; conflicts between races, ethnic groups, and minorities; prejudice, segregation and integration. Prerequisite: SOCI 101. (UG & G)

SOCI 349 SOCIAL PROBLEMS (3) Theoretical and empirical understanding of the sociological approach to contemporary social problems such as: alcoholism, drug abuse, rape, homosexuality, poverty, family disorganization, violence. Prerequisite: SOCI 101. (UG)

SOCI 351 [551] SOCIAL DEVIANCE (3) Deviance as an aspect of social living; the problem of understanding conformity and deviance; identification of deviants; society's response to deviant behavior. Prerequisite: SOCI 101. (UG & G)

SOCI 353 [553] CRIMINOLOGY (3) The nature of crime; factors underlying criminal behavior; police, courts, law, and correctional institutions. Prerequisite: SOCI 101. (UG & G)

SOCI 354 [554] INTRODUCTION TO CRIMINAL JUSTICE (3) The history, the present structure, the functions and the contemporary problems of the police, prosecution, courts, corrections, probation and parole. In addition, a brief introduction to law as an element of social control will be given. Prerequisite: SOCI 101. (UG & G)

SOCI 355 [555] JUVENILE DELINQUENCY (3) A study of delinquency; the process of socialization and delinquent behavior in society; prevention and treatment of delinquency. Prerequisite: SOCI 101. (UG & G)

SOCI 356 [556] CORRECTIONS IN AMERICA (3) The analysis of agencies and programs designed for the custody and supervision of individuals convicted of crimes. The primary focus will be on adult institutions and community corrections. Prerequisite: SOCI 353 or SOCI 354 or SOCI 355. (UG & G)

SOCI 357 [557] SOCIAL WELFARE (3) Sociological analysis of social welfare institutions and the functions they perform within modern societies. Prerequisite: SOCI 101. (UG & G)

SOCI 359 [559] SOCIAL GERONTOLOGY (3) Examination of social factors in aging from the viewpoint of the individual, the group and society; socialization process and old age, identity and social roles, loneliness and alienation; demographic aspects of aging; societal definitions, norms, values, dilemmas, and responses to the aging; evaluation of research in social gerontology. Students who received credit for Social Gerontology (2208.360) prior to Fall 1986 will not receive credit for Sociology of Aging (SOCI.360) if taken in Fall 1986 or later. Students who received credit for Sociology of Aging (2208.359) prior to Fall 1986 will not receive credit for Social Gerontology if taken in Fall 1986 or later. Prerequisite: SOCI 101. (UG & G)

SOCI 360 [550] SOCIOLOGY OF AGING (3) The study of the life cycle and the social significance of aging as well as the contemporary issues in social gerontology. Students who received credit for Social Gerontology (2208.360) prior to Fall 1986 will not receive credit for Sociology of Aging (SOCI 360) if taken in Fall 1986 or later. Students who received credit for Sociology of Aging (2208.359) prior to Fall 1986 will not receive credit for Social Gerontology if taken in Fall 1986 or later. Prerequisite: SOCI 101. (UG & G)

SOCI 361 THE AGING WORKER (3) Sociological perspective on job adjustment by society and the individual to the aging work force in the industrialized setting. Includes discussion of both job

retention and preparation for retirement. Prerequisite: SOCI 101. (UG)

SOCI 362 BASIC METHODS IN HUMAN SERVICES PRACTICE (3) Concepts and techniques useful for effective interaction in the helping relationship: interviewing social agency clients; analyzing and participating in solving of their problems. Prerequisite: SOCI 101.

SOCI 363 JOBS AND JOBLESSNESS (3) Understanding the problems of obtaining and losing jobs from a sociological perspective. Concerns itself with the nature and content of job holding in terms of status, access and wage level; characteristics of occupations and jobs, and differences among jobs as a function of formal preparation, training and social standing; focuses on constraints to entry into professions and occupations and the social meaning of unemployment. Prerequisite: SOCI 101. (UG)

SOCI 365 ISSUES IN YOUTH UNEMPLOYMENT (3) Focuses on sociological understanding of the problems of the younger worker. Concerns itself with such matters as job preparation, job counseling and job training as well as the consequences of unemployment in terms of delinquency, social disturbance and job policy. Prerequisite: SOCI 101. (UG)

SOCI 366 SOCIAL SECURITY IN ACTION (3) American Social Security Program as an idea and system, its beginnings and current programs. Prerequisites: SOCI 101. (UG)

SOCI 367 [558] SOCIOLOGY OF DEATH, DYING AND BEREAVEMENT (3) Examination of present social considerations on death including demographic, attitudinal and ritualistic variables; death education through the life cycle; structure of the grief process; impact of terminal illness on the patient and the family; ethical issues surrounding euthanasia and suicide. Prerequisite: SOCI 101. (UG & G)

SOCI 369 GROUP VOCATIONAL COUNSELING (3) Relates theory of social interaction and collective behavior to short-term, goal related counseling. Focuses both on understanding and performing group counseling techniques for vocational guidance. Utilizes role playing, playback and similar methods of skill enhancement. Prerequisite: SOCI 101. (UG)

SOCI 370-379 [560-569] TOPICS IN SOCIOLOGY (3) An examination of current topics in sociology designed for non-majors as well as majors. The content of the course will depend upon mutual faculty and student interest. May be repeated when different topic is focus of course. Prerequisite: SOCI 101. (UG & G)

SOCI 381 [581] SOCIOLOGICAL THEORY (3) Major systems of sociological theory; the works, assumptions, and implications of major European and American schools. Prerequisites: Junior standing; SOCI 101; nine additional hours of Sociology. (UG & G)

SOCI 391 [582] RESEARCH METHODS (3) A consideration of methodology of sociological research; the various steps in conducting research projects, from statement of the problem to final analysis of data. Prerequisites: SOCI 101; nine additional hours of SOCI; either PSYC 111 or MATH 231. (UG & G)

SOCI 470-479 [570-579] SPECIAL TOPICS IN SOCIOLOGY (3) An examination of current topics in sociology designed for junior and senior majors. The content of the course will depend upon mutual faculty and student interest. May be repeated when different topic is focus of course. Prerequisites: SOCI 101 and six additional hours of Sociology. (UG & G)

SOCI 485 [585] SEMINAR IN SOCIOLOGY (3) Exploring and analyzing major areas of sociology. For senior students with a major in sociology. May be repeated when different topic is focus of course. Prerequisite: SOCI 381 and consent of instructor. (UG & G)

SOCI 491-492 [591-592] PRACTICUM IN SOCIOLOGY I, II (3, 3) Supervised experience in work setting which facilitates understanding of roles and relationships relevant to sociological inquiry and application of sociological knowledge. Students may elect to take one semester for 3 credits (491) or two semesters for 3 credits each (491-492), in one agency both semesters or in a different agency each semester. No more than three credits may be earned

in a semester save with consent of the chair which will be granted only when agency requirements and student needs make it appropriate. A fee is charged for each semester in which a student is involved in the practicum. Prerequisite: SOCI major; junior standing and consent of practicum coordinator. (UG & G)

SOCI 495 [595] INDEPENDENT RESEARCH (3) Supervised research and sociological investigation involving library and/or field experiences, and culminating in a written report. Prerequisites: SOCI 381 and SOCI 391 and consent of instructor. (UG & G)

SOCI 497 SEMINAR IN SOCIOLOGY (Honors) (3) Exploring and analyzing major areas of sociology. Prerequisite: Consent of the Honors Coordinator. (UG)

SOCI 498 READINGS IN SOCIOLOGY (Honors) (4) A survey of the relevant scholarly literature under the guidance of a staff member who will direct the student's research. Prerequisite: Consent of the Honors Coordinator. (UG)

SOCI 499 HONORS THESIS (4) Supervised research and sociological investigation involving library and/or field experience and culminating in a written report. Prerequisite: Consent of the Honors Coordinator. (UG)

SPANISH (SPAN)

Lower Division

SPAN 101-102 SPANISH ELEMENTS I, II (4, 4) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation. (UG)

SPAN 201-202 SPANISH INTERMEDIATE I, II (4, 4) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings commensurate with the ability of the individual student. Conducted in Spanish. Prerequisite: SPAN 101-102 or equivalent. (UG)

Upper Division

SPAN 301-302 COMPOSITION AND CONVERSATION I, II (3, 3) Composition and conversation beyond intermediate level. Conducted in Spanish. Prerequisite: SPAN 201-202 or equivalent. (UG)

SPAN 305 READINGS IN SPANISH (3) This course is designed to improve reading and comprehension skills in Spanish, while exposing the students to introductory Spanish literature. Prerequisite: SPAN 202 or equivalent or consent of instructor. (UG)

SPAN 311 CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES I (3) Value-system and way of life as embodied in the language, history, arts and customs of Spain. Conducted in Spanish. Prerequisite: SPAN 301-302 or equivalent. (UG)

SPAN 312 CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES II (3) Value-system and way of life as embodied in the language, history, arts and customs of Ibero-America. Prerequisite: SPAN 301-302 or equivalent. (UG)

SPAN 321-322 SURVEY OF SPANISH LITERATURE I, II (3, 3) Spanish and Spanish-American literature, with collateral readings. Conducted in Spanish. Prerequisite: SPAN 201-202 or equivalent. (UG)

SPAN 331 SPANISH FOR BUSINESS (3) The fundamentals of commercial correspondence in Spanish. Focuses on the form and style of Spanish currently used in a business environment. Intensive practice in speaking, writing, and translating. Prerequisite: SPAN 201-202 or equivalent or consent of instructor. (UG)

SPAN 391 ADVANCED SPANISH GRAMMAR (3) Spanish syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Conducted in Spanish. Prerequisite: SPAN 301-302. (UG)

SPAN 401 [501] SPANISH PHONETICS (3) Drills in contemporary Spanish pronunciation. Prerequisite: SPAN 301-302 or equivalent. (UG & G)

SPAN 402 [502] SPANISH LINGUISTICS (3) The linguistic structure of the Spanish language with an introduction to transfor-

mational grammar. Conducted in Spanish. Prerequisite: SPAN 301-302 or equivalent. (UG & G)

SPAN 403 [503] THE POETRY AND THEATER OF FEDERICO GARCIA LORCA (3) Lorca's contributions to Spanish theater and poetry are analyzed in the context of the literary and social developments of pre-Civil War Spain. Prerequisite: SPAN 321-322 or equivalent. Conducted in Spanish. (UG & G)

SPAN 411 [511] NINETEENTH-CENTURY SPANISH NOVEL (3) Emphasis will be given to Benito Perez Galdos and Pio Baroja. Conducted in Spanish. Prerequisites: SPAN 321-322. (UG & G)

SPAN 412 [512] CONTEMPORARY SPANISH NOVEL (3) Emphasis on such writers as Cela, Sender, Delibes and Goytisolo. Conducted in Spanish. Prerequisites: SPAN 321-322 or equivalent. (UG & G)

SPAN 417 [517] THE GOLDEN AGE IN SPANISH LITERATURE I (3) Principal attention to Cervantes, Tirso de Molina, Lope de Vega, and Ruiz de Alarcon. Conducted in Spanish. Prerequisite: SPAN 321-322. (UG & G)

SPAN 419 [519] LITERATURE OF THE CUBAN REVOLUTION (3) A study of the literature of the Cuban Revolution in its historical and ideological context. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 431 [531] NINETEENTH CENTURY SPANISH LITERATURE (3) The main literary movement of the century: neoclassicism, romanticism, realism, naturalism, and special emphasis on "costumbrismo." Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 437 [537] ROMANTICISM IN SPANISH AMERICAN LITERATURE (3) This course is designed to study the characteristics of romanticism in Spanish America through a study of the most representative works of the outstanding authors of this period. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent or consent of instructor. (UG & G)

SPAN 439 LITERARY MOVEMENTS IN THE SPANISH AMERICAN LITERATURE (3) Characteristics of the literary movements in Spanish America through the most representative short stories of every period. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 444 [544] TWENTIETH CENTURY SPANISH-AMERICAN LITERATURE II (3) The Contemporary Period. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 452 [552] CONTEMPORARY SPANISH POETRY (3) Emphasis on the poets of the generation of 1927; Pablo Neruda, and zicente Aleixandre. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 462 [562] CONTEMPORARY SPANISH DRAMA (3) Emphasis on playwrights such as Casona, Sastre and Buero Vallejo. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 470-479 [570-579] SPECIAL TOPICS IN SPANISH (3) Discussion of a central topic with changing emphasis from year to year. Prerequisite: SPAN 321-322 or the equivalent. (UG & G)

SPAN 481 [581] SPANISH SHORT STORIES (3) The short stories in Spain with emphasis on twentieth century authors. Conducted in Spanish. Prerequisite: SPAN 321-322 or equivalent. (UG & G)

SPAN 483 [583] SPECIAL TOPICS IN FOREIGN LANGUAGE TEACHING (3) Studies in the area of language teaching techniques with changing emphasis from year to year. Prerequisite: Consent of the department chair. Junior or Senior majors only. (UG & G)

SPAN 491 [591] DIRECTED READINGS IN SPANISH LITERATURE (1-3) Reserved for superior students under the guidance of a departmental advisor. Conducted in Spanish. Prerequisites: At least three hours of literature study at the 400 level, consent of department chair. (UG & G)

SPAN 492 [592] DIRECTED READINGS IN SPANISH (1-3) Similar to Spanish 491 with concentration on a different subject matter. Conducted in Spanish. Junior or senior majors only. Prerequisites:

At least three hours of literature study at the 400 level, consent of department chair. (UG & G)

SPAN 494 TRAVEL STUDY ABROAD (3) A study of the main features of Hispanic culture and civilization. Cities and topics to be selected. For complete information contact the chair of the department. Prerequisite: Consent of instructor. (UG)

SPAN 495 PRACTICUM FOR THE CERTIFICATE OF PROFICIENCY IN SPANISH (3) Supervised experience in a work setting providing students the opportunity to apply their classroom learning and skills outside the academic world. Will be one semester (Fall or Spring) for which students receive three credits for eight hours of work per week. Junior or senior undergraduate students in good academic standing and who meet the requirements established for the CERTIFICATE OF PROFICIENCY IN SPANISH should apply for the PRACTICUM during the month of November for the Spring semester and during the month of April for the Fall semester. Prerequisite: Open to students who are enrolled in the Certificate of Proficiency Program in Spanish who have complied with the program regulations. Written consent of Department Chair and Coordinator of the Program. (UG)

SPAN 497 INTERNSHIP IN SPANISH (3) This program is designed to give training and experience using Spanish in working with the government, business and industry in Maryland or Washington, D.C. under professional supervision. Prerequisites: Junior-Senior standing and written consent of chair and coordinator of program. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

SPAN 605 SPANISH STYLISTICS (3)

SPAN 636 POETRY & DRAMA OF THE SPANISH GOLDEN AGE (3)

SPAN 653 MIGUEL DE CERVANTES (3)

SPAN 670-679 SPECIAL TOPICS IN SPANISH LANGUAGE, LITERATURE AND CIVILIZATION (3)

SPAN 685 SEMINAR IN MODERN SPANISH LITERATURE (3)

SPECIAL EDUCATION (SPED)

Upper Division

SPED 301 INTRODUCTION TO SPECIAL EDUCATION: K-12 (3) Historical, philosophical and legal foundations of special education. Perspectives in these areas as they relate to current educational issues and to practices in regular and special classroom settings. Prerequisite: PSYC 201 or consent of instructor. (UG)

SPED 411 THE HOSPITALIZED CHILD (3) Focus is on the psychological effects of hospitalization on children and their families; presents strategies for operating pediatric playrooms in hospitals; field placement in pediatric unit of area hospital required. Prerequisites: Three credits Early Childhood Education, Elementary Education, or Nursing and consent of instructor. Spring. (UG)

SPED 425 TESTS AND MEASUREMENTS FOR MILDLY/MODERATELY HANDICAPPED CHILDREN ASSESSMENT TECHNIQUES: Philosophical rationale; current research; intervention strategies for mildly and moderately handicapped children. Prerequisites: 6 hrs. PSYC; 9 hrs. SPED or consent of instructor. (UG)

SPED 427 SOCIAL, EMOTIONAL, PHYSICAL DEVELOPMENT OF MILDLY/MODERATELY HANDICAPPED CHILDREN Overview of human development characteristics and applied techniques in curriculum, instructional methodology: social, emotional, physical of mildly/moderately handicapped children. Prerequisites: 6 hrs. SPED or consent of instructor. (UG)

SPED 470-479 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3) In-depth study of a selected topic in Elementary Education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Each topic may be taken as a separate course. (UG)

SPED 481 [581] METHODS AND MATERIALS FOR TEACHING THE VISUALLY IMPAIRED (3) Designed to examine recog-

nized methods, materials, and programs for teaching children who are visually impaired. Offered in cooperation with Maryland School for the Blind. Prerequisites: SPED 483 and consent of instructor. (UG & G)

SPED 483 [583] BRAILLE READING AND WRITING (3) Designed to meet needs of teachers who will be teaching the visually impaired to read and write braille. Consent of instructor. (UG & G)

SPED 491 PRACTICUM: MILDLY/MODERATELY HANDICAPPED CHILDREN IN ELEMENTARY/MIDDLE GRADES Supervised clinical field experience for students planning to work with mildly/moderately handicapped elementary/middle school students. Prerequisites: 12 hrs. SPED and consent of Coordinator of Special Education.

SPED 497 PRACTICUM: MILDLY/MODERATELY HANDICAPPED YOUNG CHILDREN Supervised clinical field experience for students planning to work with mildly/moderately handicapped infants/primary children. Prerequisites: 12 hrs. and consent of Coordinator of Special Education.

SPED 498 STUDENT TEACHING: SPECIAL EDUCATION Placement in special education classroom either public or private at the age/grade appropriate for student's program. Prerequisites: 18 hrs. SPED and consent of Coordinator of Special Education.

Graduate Division

See *TSU Graduate School Catalog* for course descriptions

SPED 641 INTERVENTION TECHNIQUES—CHILDREN WITH SPECIAL NEEDS (3)

SPED 670-679 SPECIAL TOPICS IN SPECIAL EDUCATION (Topics to be named) (1-3)

SPED 741 INTERNSHIP—CHILDREN WITH SPECIAL NEEDS (3-6)

SPEECH COMMUNICATION (SPCH)

Lower Division

SPCH 131 FUNDAMENTALS OF SPEECH COMMUNICATION (3) Historical and practical perspectives of rhetoric and public speaking, including their significance to the development of the humanities. Researching topics, developing ideas with evidence, preparing outlines, delivering and critiquing speeches. (UG)

SPCH 132 HONORS FUNDAMENTALS OF SPEECH COMMUNICATIONS (3) Instruction in various kinds of public speaking (e.g., informative, persuasive, introductory and impromptu): doing research, developing ideas with evidence, preparing outlines, delivering and critiquing speeches with emphasis on rhetorical criticism and ethical issues in speech communication. (UG)

SPCH 216 GROUP DISCUSSION (3) Theory and methods of group discussion; practice in forums, panels, and other forms of group communication. Prerequisite: SPCH 131. (UG)

SPCH 221 ORAL INTERPRETATION OF LITERATURE (3) General principles of oral reading and the art of interpretation in poetry, drama, and the short story. Prerequisite: SPCH 131 or consent of instructor. (UG)

SPCH 249-250 FORENSICS I, II (1, 1) Practical work in debate, oratory, extemporaneous speaking, and other speech projects. Study of national debate questions, and opportunity to participate in forensic activities or a Speaker's Bureau. Prerequisite: Consent of instructor. (UG)

Upper Division

SPCH 301 NONVERBAL COMMUNICATION (3) Examination of the elements of nonverbal communication: environment, personal space, physical appearance, body movement, gestures, touching behavior, facial expression, and vocal cues. Course will investigate the effects of these on interpersonal and public communication. Prerequisite: SPCH 131, or consent of instructor. (UG)

SPCH 303 ADVANCED PUBLIC SPEAKING (3) Principles and application of evidence, composition, organization, analysis and criticism. Manuscript, persuasive and impromptu speaking. (UG)

SPCH 304 [504] PERSUASION (3) Theory and practice of linguistic and symbolic persuasion; applications of rhetorical principles in social sciences and formal and informal communication; analysis of rhetoric through discussion. Prerequisite: SPCH 131. (UG & G)

SPCH 320 [520] READERS THEATRE (3) Oral interpretation of selections from dramatic literature and individual and group reading. Includes principles of selecting, cutting, and programming in literature. Prerequisite: SPCH 221 and consent of instructor. (UG & G)

SPCH 321 INTERPERSONAL COMMUNICATION (3) The process of interpersonal communication will be studied through an examination of such concepts as self-concept, empathetic listening, and meaning. The student will engage in exercises and assignments designed to develop interpersonal communication skills. The effects of conflict and human differences upon interpersonal communication will be explored. Prerequisite: SPCH 131. (UG)

SPCH 331 ADVOCACY AND ARGUMENT (3) Essentials of argumentation; research, analysis, evidence, reasoning, case construction and refutation. Applications in fact, value, and public policy settings. Prerequisite: SPCH 131 or consent of instructor. (UG)

SPCH 349-350 FORENSICS III, IV (1, 1) Refer to SPCH 249, SPCH 250 for course description. Prerequisite: SPCH 249-250 and consent of instructor. (UG)

SPCH 395 [595] INDEPENDENT STUDY IN ORAL INTERPRETATION (1-6) Independent study in selected areas of oral interpretation through directed readings, projects, papers or seminars. May be repeated for a maximum of 6 credits. Prerequisite: SPCH 221 and consent of instructor. (UG & G)

SPCH 411 [511] INDEPENDENT STUDY IN CHAMBER THEATRE (1-6) Independent study in selected areas of Chamber Theatre through directed readings, projects, performances, papers or seminars. May be repeated for a maximum of 6 credits. Prerequisite: SPCH 320. Fall, Spring, Summer by request. (UG & G)

SPCH 419 ORGANIZATIONAL COMMUNICATION (3) The process of communication within organizations will be examined. Such topics as message dissemination, information overload, trust levels and work group interaction will be analyzed as to their impact on individuals and the organization. Emphasis will be placed on practical application of techniques in diagnosing and resolving organizational communication problems. Prerequisite: SPCH 131 or MCOM 211 or MNGT 211 or consent. (UG)

SPCH 420 COMMUNICATION IN THE LEGAL PROCESS (3) Focus on communication questions and skills by lawyers, judges, litigants and jurors in criminal and civil justice. Survey of research related to verbal and nonverbal aspects of communication as they apply to the legal concerns of interview, negotiation and litigation. Prerequisites: Junior/Senior standing and consent of instructor. (UG)

SPCH 493 [593] INDEPENDENT STUDY IN READERS THEATRE (1-6) Independent study in selected areas of Readers Theatre through directed readings, projects, papers or seminars. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisite: SPCH 320 or consent of instructor. (UG & G)

SPCH 495 INDEPENDENT STUDY IN SPEECH COMMUNICATION (1-6) Independent study in selected areas of speech communication through directed readings, projects, papers, or seminars. May be repeated for a maximum of 6 credits. No more than 6 credits of Independent Study and/or Practicum can be applied to the major and minor. Prerequisite: Consent of instructor. (UG)

THEATRE ARTS (THEA)

Lower Division

THEA 101 BEGINNING ACTING (3) Theory and practice of acting. The development of the actor's imagination and techniques through improvisations, pantomimes, exercises, and simple scenes. (UG)

THEA 103 INTRODUCTION TO THE THEATRE (3) Theatrical experience through study of the various types, styles and production processes of the theatre. Theatre as a public art and its relationship to our culture. (UG)

THEA 105 MOVEMENT DRILL FOR THE ACTOR (3) Theory and practice in movement to facilitate efficiency of movement patterns and development of characterization skills in acting. (UG)

THEA 111 VOICE DRILL FOR THE ACTOR (3) Theory and practice in voice to help the actor develop an instrument that facilitates characterization on stage. (UG)

THEA 125 SCRIPT ANALYSIS (3) Study of the play, emphasizing the analysis of structure, genre, theme, style, character, language, dramatic event, and point of view of actor, director, designer, critic and audience. Introduction to theatre research methods. (UG)

THEA 141 GRAPHIC TECHNIQUES FOR THE THEATRE (3) Standard graphic practices of the designer. Reading and producing of working drawings, models and renderings. (UG)

THEA 201 SCENERY DESIGN I (3) Practice in such techniques as drafting, elevation, drapery sketching, figure drawing, and rendering techniques to prepare a student to work in a set or costume design. (UG)

THEA 203 VOICE PRODUCTION FOR THE ACTOR (3) Theory and practice of voice production with emphasis on the speaking voice. Work on understanding the vocal mechanism and on applying that awareness to the freeing, development, and strengthening of the voice. Prerequisite: THEA 101. (UG)

THEA 205 THEATRE GAMES (3) Exercises in "game structures" to develop creativity, encourage work on personal acting techniques and free the actor from mechanical stage behavior. Prerequisite: THEA 101. (UG)

THEA 207 THEATRE ARTS FOR CHILDREN (3) Theory and techniques of playmaking for children. Lecture, demonstration and participate in pantomime, improvisation, and story dramatization. (UG)

THEA 209 SOUND DESIGN (3) Basic electronic and acoustic information and its relationship to theatre application. (UG)

THEA 211 HISTORY OF THEATRE AND DRAMA I (3) History of theatre and drama and their relationship to other fine arts and humanistic studies. Origins, Greek, Roman Medieval, Elizabethan, Spanish Golden Age. Prerequisite: THEA 125. (UG)

THEA 212 HISTORY OF THEATRE AND DRAMA II (3) History of theatre and drama and their relationship to the other fine arts and humanistic studies. Italian Renaissance, French Classicism, Restoration, Eighteenth Century, Nineteenth Century Romanticism. Prerequisite: THEA 125. (UG)

THEA 213 HISTORY OF THEATRE AND DRAMA III (3) History of theatre and drama and their relationship to the other fine arts and humanistic studies. Nineteenth Century Realism to the present. Nonwestern theatre. Prerequisite: THEA 125. (UG)

THEA 221 INTERMEDIATE ACTING I (3) The study of and preparation for scene study. Emphasis will be given to ensemble building, voice, movement, self awareness, concentration, and character development. Prerequisites: THEA 101 and consent of instructor. (UG)

THEA 231 MIME I (3) Basic techniques of the art of Mime. Exercise and performance in basic mime gestures, illusions and walks. Exercise in ensemble. Several performance projects are done. (UG)

THEA 241 COSTUME HISTORY AND DESIGN: EGYPT TO RENAISSANCE (3) Study of costume from ancient Egyptian civilization to the Renaissance. Costume design and construction. Work on crews for college drama productions. (UG)

THEA 242 COSTUME HISTORY AND DESIGN: ELIZABETHAN TO 1940 (3) Study of costume from the Elizabethan to 1940. Costume design and construction. Work on costume crews for college drama productions. (UG)

THEA 245 STAGE MAKEUP I (2) Survey of materials and study of theories and techniques of stage makeup. Class meets for two hours per week. (UG)

THEA 246 STAGE MAKEUP II (2) Advanced stage makeup using materials such as foam latex, rubber, collodion, and mask making and doing complete detailed character makeups. Prerequisite: THEA 245. (UG)

THEA 251 STAGECRAFT I (3) Technical aspects of play production including scene construction, scene painting, property building and stage lighting. (Work on technical crews for university drama productions required.) (UG)

THEA 255 STAGE LIGHTING I (3) The study of basic equipment and theory of stage lighting including tools, techniques and artistic considerations. The course begins with basic theory and moves to simple applications. (Not open to students who have completed THEA 355.) (UG)

THEA 257 STAGE AND PRODUCTION MANAGEMENT (3) This course will outline a comprehensive view of theatrical production in the United States. We will examine the problems of theatre production as they apply to commercial theatre, college theatre, community theatre, repertory theatre and resident theatre companies. The principles of public relations, house management, plant organization, financing, personnel management, audience development and box office control are fully explored. Prerequisite: THEA 251 and consent of instructor. (UG)

THEA 261 ACTING FOR MUSICAL THEATRE I (3) An introduction to the acting problems inherent in Musical Theatre performance. Theory and practice. The development of the actor's awareness, imagination, and technique through lectures, improvisations, exercises, and ensemble scenes. Prerequisite: THEA 101 or consent of instructor. (UG)

THEA 262 ACTING FOR MUSICAL THEATRE II (3) Theory and practice of acting in a musical theatre situation. Work in scene and role analysis, character development, and personal performing technique. Prerequisites: THEA 261 and consent of instructor. (UG)

THEA 285 BEGINNING THEATRE WORKSHOP (4) Experiences in acting, mime, voice production, directing, and musical theatre. (UG)

Upper Division

THEA 301 TECHNIQUES OF COMEDY (3) An introduction to the theories and uses of comedy. Varied practice in comic performance with an emphasis on material emanating from the student's experience. Prerequisites: THEA 101 and one other Acting or Mime course or consent of instructor. (UG)

THEA 305 FEMINIST THEATRE (3) A study of the feminist theatre and theatre roles for women prior to the feminist theatre movement. Prerequisite: THEA 101. (UG)

THEA 307 THEORIES OF THEATRE (3) Theories in acting, directing, design and dramaturgy from the classical through the modern period. Prerequisites: THEA 211, THEA 212, THEA 213, and consent of instructor. (UG)

THEA 309 INTERMEDIATE ACTING II (6) Scene study with concentration in character development, approaching a script, structuring a scene, relating to environment, ensemble work and audition techniques. Prerequisites: THEA 105, THEA 221, a voice class and consent of instructor. (UG)

THEA 311 CHILDREN'S THEATRE PRODUCTION (3) An examination of the nature, philosophy and problems of children's theatre with practical work in acting, directing and production techniques in plays for children's audience. Prerequisites: THEA 101 and THEA 241 or THEA 242, or THEA 251 or consent of instructor. (UG)

THEA 313 SCENE STUDY I (3) Basic techniques of scene study in acting, such as motivation, internalization, structure, climax, objective, build and intensity. Prerequisites: THEA 101, THEA 221 and THEA 309. (UG)

THEA 315 SCENE STUDY II (3) Advanced acting in scenes that have specific motivational, analytical, character or other acting problems. May be repeated for a maximum of 6 credits. Prerequisites: THEA 101, THEA 221, THEA 321, and THEA 313. (UG)

- THEA 331 PLAY DIRECTING I (3)** Fundamentals of play directing through exercises, directorial play analysis, and projects in directing short scenes. Prerequisites: THEA 101 and consent of instructor. (UG)
- THEA 332 MIME II (3)** Advanced mime technique, ensemble exercises, and performances in the Italian, Oriental, French and American schools. Environmental, improvisational and street mime directing. Prerequisites: THEA 231 and consent of instructor. (UG)
- THEA 343 ADVANCED VOICE PRODUCTION FOR THE ACTOR (3)** Advanced theory and practice of voice production in the acting process. Prerequisites: THEA 203 and consent of instructor. (UG)
- THEA 351 STAGECRAFT II (3)** Application of new technology to scene construction. Methods of moving scenery. Dealing with space and budget limitations. Principles behind good modern stage technology. Prerequisites: THEA 251 and consent of instructor. (UG)
- THEA 353 COSTUME DESIGN I (3)** Theories and principles of costume design for the stage. Research techniques and relationship of color, texture and historical period to the script and production style. (UG & G) (Not open to students who have completed THEA 441).
- THEA 355 STAGE LIGHTING II (3)** Theories of light and electricity as they apply to stage lighting. The authenticity of stage lighting. Planning light plots. The examination of space applications of stage lighting. Prerequisites: THEA 251, THEA 255 and consent of instructor. (UG)
- THEA 361 SCENERY DESIGN II (3)** Theory and practice of designing scenery for the stage. Includes a study of the relationship of the set design and other elements of production; and examination of research techniques in preparation for scene designing and practice in designing scenery for many styles and types of drama. Prerequisite: THEA 201 or consent of instructor. (UG)
- THEA 405 ACTING & WRITING FOR FEMINIST THEATRE (3)** The student will write and perform scenes and projects in various feminist theatre styles including the monologue, the two woman show, the one woman show and the traditional scene. The course offers the student opportunities in original writing, editing, cutting, analyzing, critiquing, directing and performing. Prerequisite: THEA 305. (UG)
- THEA 407 THEATRE ARTS FOR CHILDREN—ADVANCED (3)** Extended study of material and variety of techniques in the use of theatre as means of expression by children. Practical experience in guiding and directing children in creative dramatic activities in a classroom or other arranged situation. Prerequisite: THEA 207. (UG)
- THEA 421 PLAY DIRECTING II: THE CONTEMPORARY PLAY (3)** Preparation techniques and directorial approaches to contemporary drama. Individual directing projects of scenes from representative contemporary dramas. Prerequisite: THEA 331 or consent of instructor. (UG)
- THEA 425 PROBLEMS IN ACTING STYLE (1-9)** Advanced work in the problems of acting plays from poetic and historic theatre. Scenes from Shakespeare, Moliere, Ibsen, Brecht, etc., will be studied and performed by the student in the context of discussion and research about the playwrights' world. Course may be repeated for a maximum of 9 credits, no more than 3 credits to be taken in any semester. Prerequisites: THEA 313 and consent of instructor. (UG)
- THEA 427 PROBLEMS IN DIRECTING (1-9)** Preparation, rehearsal and production of special directing projects. May be repeated for a maximum of 9 credits. Prerequisites: THEA 331 and consent of instructor. (UG)
- THEA 429 PROBLEMS IN TECHNICAL THEATRE (1-9)** Special problems in the area of Technical Theatre. May be repeated for a maximum of 9 credits. Prerequisites: THEA 201, THEA 255 and consent of instructor. (UG)
- THEA 431 DIRECTING THE PERIOD PLAY (3)** Research techniques and directorial approaches to period drama. Individual

directing projects of scenes from representative period dramas. Prerequisite: THEA 331 or consent of instructor. (UG)

- THEA 443 STRUCTURAL DESIGN (3)** Principles of structural designs, external forces, and internal resistance. Prerequisite: MATH 115, PHYS 211-212, THEA 251 or consent of instructor. (UG)
- THEA 445 SCENE PAINTING (3)** Aesthetic and technical considerations of scene painting. Prerequisite: THEA 201, 361, ART 201 or consent of instructor. (UG)
- THEA 453 COSTUME DESIGN II (3)** Advanced costume design including fabric selection, budget preparation, pattern choices, resumes and portfolio. Prerequisites: THEA 353 or THEA 441.
- THEA 480 [580] PROBLEMS IN DESIGN (1-9)** Special problems in the area of design. May be repeated for a maximum of 9 credits. Prerequisites: THEA 201, THEA 241 or THEA 242, THEA 251 and consent of instructor. (UG & G)
- THEA 485 [585] ADVANCED THEATRE WORKSHOP (4)** Practical experience in acting, musical theatre and the performance process with high school students enrolled in Beginning Theatre Workshop. Contact Summer Theatre Workshop Director by June 1. Prerequisites: Junior/Senior standing and consent of instructor. (UG & G)
- THEA 487 PROFESSIONAL THEATRE SEMINAR (1-12)** A semester's internship in a resident theatre company. For majors only. Prerequisite: Consent of department. (UG)
- THEA 489 SENIOR ACTING SEMINAR (3)** Auditioning techniques, unions, agents, resumes, the transition from student to professional and the realities of professional theatre. Open to seniors in Acting Concentration. Prerequisites: THEA 313, THEA 315, completion of acting sequence and consent of instructor. (UG)
- THEA 491 THEATRE PRODUCTION (3)** Experience involving major responsibility on a departmental production. Examples of such experiences include set design, costume design, stage managing and major acting and directing assignments. Prerequisite: Five successfully completed non-credit theatre practicums. (UG)
- THEA 493 [593] PROBLEMS IN THEATRE (1-9)** Independent study of an academic or creative nature. For majors only. May be repeated for a maximum of 9 credits. Prerequisite: Approval of plan of study by instructor and director of theatre. (UG & G)
- THEA 499 SPECIAL PROJECT IN THEATRE RESEARCH (3)** Seminar to demonstrate the student's proficiency in an area of theatre research agreed upon by the student and his/her advisor. Projects may be undertaken in the following areas: Theatre History; Dramatic Structure and Criticism; Directing; Stage, Lighting and Costume Design. All projects must entail research and the reportage of such research in the form of a thesis paper, which must adhere to high standards of scholarly writing. Prerequisites: Senior major or graduate standing and THEA 211, THEA 212, THEA 213. (UG)

WOMEN'S STUDIES (WMST)

Lower Division

- WMST 231 WOMEN IN PERSPECTIVE (3)** A survey of the past, present, and possible future place of women as individuals and as members of society. Topics include marriage, motherhood, education, jobs, sexuality, race and class. (UG)

Upper Division

- WMST 332 [532] WOMEN'S CULTURE AND CREATIVITY (3)** Study of the historical conditions influencing women's creativity, the nature of women's aesthetic achievements, and the emergence of new female cultural and artistic traditions. Prerequisite: Six hours in art or literature. (UG & G)
- WMST 333 WOMEN'S WORDS, WOMEN'S LIVES (3)** Practice in and study of expository writing about women. Readings include biographies, autobiographies, letters, and journals; student writing will focus on such topics as women's roles, relationships, and action. Prerequisite: ENGL 102; one course in Women's Studies or one additional English course. (UG)

WMST 335 [535] WOMEN, WORK AND FAMILY (3) Women's work examined historically and cross-culturally from an interdisciplinary perspective. Women's work in traditional societies, effects of industrialization on women's work, and women's paid and unpaid work in contemporary societies. Prerequisites: 3 credits social science or history. (UG & G)

WMST 337 FEMINISM (3) An examination of feminism as a set of ideas, and the systematic application of those ideas to achieve political, social, and economic equality. Prerequisite: Three hours in social sciences or three hours in Women's Studies or consent of instructor. (UG)

WMST 370 TOPICS IN WOMEN'S STUDIES (3) An inter-disciplinary examination of selected issues, themes, or topics in women's studies. Variation in content in different semesters; may be repeated. Prerequisite: One Women's Studies course or consent of instructor. (UG)

WMST 481 DIRECTED READINGS FOR HONORS IN WOMEN'S STUDIES (3-4) Reading and research in preparation for the writing of an Honors Thesis. Prerequisite: Consent of the departmental honors coordinator. (UG)

WMST 485 SEMINAR IN WOMEN'S STUDIES (3) Advanced study in a specialized area of women's studies. May be repeated for a maximum of six credits. Prerequisites: WMST 231 and WMST 337 or equivalent. (UG)

WMST 491 [591] DIRECTED READING IN WOMEN'S STUDIES (1-4) Independent reading in women's studies with emphasis on interdisciplinary relationships. Topics selected by student in consultation with the instructor. May be repeated for a maximum of 6 credits. Prerequisites: 15 hours in interdisciplinary or departmental Women's Studies courses; minimum 3.00 average in Women's Studies; consent of instructor and coordinator of Women's Studies. (UG & G)

WMST 496 [596] PRACTICUM IN WOMEN'S STUDIES (3 or 6) Field placement for students in agencies or organizations working on projects which serve women. May be repeated for credit, but only three credits may be counted in the minimum forty-five credits required in the General Studies major. Prerequisites: Upper level or graduate standing; WMST 231; one other Women's Studies course and consent of instructor. (UG & G)

WMST 499 HONORS THESIS (3) Thesis preparation in a chosen area of specialization. Prerequisite: Consent of the departmental honors coordinator. (UG)

WRITING (WRIT)

WRIT 312 [512] HISTORY OF SCIENCE (3) This course will present a general overview of the development of scientific knowledge

from ancient to modern times. It will examine how our modern scientific worldview has been shaped by major periods of scientific development, particularly in the 16th and 17th centuries involving primarily astronomy and physics, and in the 19th and 20th including geology, biology, and psychology as well. Attention will be given to the relations between science and culture, religion, technology, and public policy. Not open to those who completed History of Science, PHYS 312. (UG & G)

WRIT 354 INTRODUCTION TO CRIMINAL JUSTICE (3) The history, the present structure, the functions and the contemporary problems of the police, prosecution, courts, corrections, probation and parole. In addition, a brief introduction to law as an element of social control will be given. Prerequisite: SOCI 101, ENGL 102 or 190 (104). (UG)

WRIT 361 CONTROVERSIES IN ANTHROPOLOGY (3) This course is designed to integrate writing, discussion and visual learning by focusing on a number of significant controversial issues in cultural anthropology. Students will read divergent assessments on each issue under study. In addition, films will be shown which further illuminate the topics. The topics covered will be selected to cover a diverse range of areas including: socio-biology, social organization, warfare, religion, medical systems and modernization. Prerequisite: ANTH 207. (UG)

WRIT 411 ORGANIZATIONAL COMMUNICATIONS (3) Study of factors influencing communication in organizations such as business, industry, and government, including the nature of communication, organizational structure, downward and upward communication, conflict, groups, interactions, and communication channels. Emphasis will be on detailed analysis of communications, particularly written communications. Prerequisites: ENGL 102 or 190 (104) and lower-level English course. (UG)

Graduate Division

See *TSU Graduate School Catalog* for course descriptions.

WRIT 613 THEORY OF EXPOSITION (3)

WRIT 615 THEORY OF PROSE STYLE (3)

WRIT 617 EDITING (3)

WRIT 619 COMMUNICATION IN THE PROFIT/NON-PROFIT SECTORS (3)

WRIT 691 RESEARCH TECHNIQUES IN PROFESSIONAL WRITING (3)

WRIT 701 BUSINESS WRITING (3)

WRIT 711 MANAGING A PROFESSIONAL JOURNAL (3)

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Appendix A

UNIVERSITY GOALS

I. By far the highest priority of the university shall be to provide a sound liberal arts and sciences education for all students regardless of their major or occupational ambitions.

A. Guidelines for achieving this would include the following:

1. General education requirements shall provide the student with a coherent introduction to the basic concerns and concepts of the arts and sciences. The courses shall be designed to serve a general education purpose rather than to serve as introductions for majors. Interrelationships between the arts and sciences courses in the general education requirements shall be a goal of design and planning and shall be explicitly stressed in the classroom.
2. The number of hours required for a major in a discipline shall not become so large as to interfere with the student's exposure to other disciplines and ultimate attainment of a liberal arts and science education. *Every student should take at least 60 hours of course work outside the major.*
3. Majors will be encouraged to take courses in areas outside their major with the accompanying effort on the part of faculty in course design and evaluation to make it possible for non-majors to compete effectively in upper level courses outside their major.
4. Some experience in interdisciplinary courses at upper and/or lower levels shall be available and encouraged.
5. Students will be encouraged to study a foreign language for the benefits such study offers in understanding language itself, in understanding other cultures, and in mental discipline.
6. A definition of undergraduate curriculum shall be formulated to serve as a guide to departments and university committees in order to avoid the creation of specialized courses that more properly belong at the graduate level and that would subvert the achievement of a liberal arts and sciences education.
7. Literacy, defined as the ability to read, write, and speak English intelligently, must be achieved by the student and stressed in all the courses in the curriculum in assignments and evaluation. Similarly, basic mathematical and basic scientific skills and concepts must be mastered by the student. Standards of literacy in these areas applied without exception will be established and maintained throughout the entire curriculum.
8. An effective program of advisement shall be established to ensure that the student has the benefit of faculty advice on how to achieve a sound and coherent liberal education. The concern of the advisor will be with the student's total university experience, not just the courses in his/her major.
9. To find out how effective our mutual efforts have been in providing a liberal arts and sciences education, systematic procedures should be developed and implemented to assess and evaluate student achievement.

II. The campus environment shall provide ideal conditions for learning—learning between student and teacher, student and student, teacher and teacher, and between these and the staff, alumni, and citizens concerned with intellectual and professional pursuits.

A. Guidelines for achieving this would include the following:

1. New ways have to be found to provide our students with a sense of community and common purpose in the learning process, to revive the sense of excitement in grappling with ideas or pursuing a problem. Special attention needs to be devoted to the commuter student who only attends classes and has no informal opportunities for learning on campus.
2. Faculty learning would be enhanced by more and better interaction with the students as described above, but faculty also need to have more contact with faculty in other departments. The exchange of ideas, the increased understanding of the merits and problems of other disciplines, the enlarged perspective on the university as a whole, and a

greater sense of community would be only a few of the benefits of such communication. Various possibilities for faculty interaction shall be studied and implemented.

3. The working conditions for faculty in terms of office space and number of students have a considerable influence on their ability to be effective. Providing adequate office space, i.e., private offices, and achieving a more favorable faculty/student ratio will be high priorities in building and remodeling design and budget allocations.

4. Community resources relevant to the academic pursuits of the university will be sought and utilized in the academic program.

III. The university shall support programs leading to the development of skills and knowledge useful in future employment.

A. Guidelines for achieving this would include the following:

1. The academic preparation of the student should represent a balance between preparation in the liberal arts and training for a career. To achieve this balance the student will require careful advisement from both his or her academic major field and from other related disciplines. Courses designed to contribute to career development should supplement liberal arts preparation and should be taken after the student has carefully considered his or her interests and abilities.

IV. Excellence in student, faculty, and administrative performance shall be encouraged by relevant, constructive evaluation and recognition.

A. Guidelines for achieving this would include the following:

1. Reasonably uniform expectations of student performance, in terms of amount of work in relation to credit hours and level of performance in relation to grades, shall be defined and maintained. Other methods of evaluation and reward will also be studied and considered.
2. Student evaluations of faculty will be under continual review to determine their value as measures of excellence.
3. Promotion and tenure criteria for faculty shall be defined and applied with reasonable consistency. Additional means of reward will be developed.
4. Administrative performance shall be subject to faculty and student evaluation with the proviso indicated above in number 2.
5. The university shall strive to cultivate in all members of the university community the ability to recognize excellence and to respect it wherever it is found.

V. The university shall provide equal educational opportunity for the population it serves.

A. Guidelines for achieving this would include the following:

1. The university shall strive to eliminate discrimination based on race, sex, religion, and age at all levels of university life with special attention given to:
 - (a) Liberal admissions policies with concomitant compensatory education if needed.
 - (b) Academic and career advising that is free of irrelevant stereotypes.
 - (c) A curriculum that makes every attempt to represent minority groups and women equitably.
 - (d) Classroom presentations that are free of gratuitous derogation of race or sex.
 - (e) Equal opportunity recruitment, hiring, and advancement.
2. The university shall eliminate the distinction between full- and part-time students in the cost of education for the student and in enrollment in day and evening classes.
3. The university shall continue to develop programs and policies that respond to the emerging continuing education needs and interests of the population served by the university. Such programs and policies will be consistent with the liberal arts and sciences mission of the university (See I).

VI. The university shall maintain its autonomy from unreasonable influence by outside governing bodies and special interest groups.

A. Guidelines for achieving this would include the following:

1. While it is reasonable that the governing boards and agencies of the state of Maryland have the right to establish policies for the university as a whole, the internal decision on how to implement those policies should remain the prerogative and responsibility of the university.

2. Similarly, once the total budget for the university has been determined, the internal fiscal decisions should remain the prerogative and responsibility of the university.
3. While cooperative ventures with individuals or groups with special interests may often be of mutual benefit, the university shall retain the right to reject such support if it is judged to be harmful to the academic interests of the university.

Appendix B

CAMPUS FACILITIES

ACADEMIC BUILDINGS

STEPHENS HALL—This distinctive Jacobean building, constructed in 1915, has long been a landmark in the Baltimore area. The building was closed in 1986 for major renovation and is scheduled to be open for the Fall semester 1989.

VAN BOKKELEN HALL—A classroom building for the departments of communication sciences and disorders and speech and mass communication, this facility contains therapy rooms for speech pathology and audiology majors, as well as a production studio for rehearsing radio and television broadcasts.

LINTHICUM HALL—Completed in 1967 and one of the largest classroom buildings on campus, it houses the departments of English, modern languages, history, philosophy, geography, sociology, political science, and economics, and associated offices.

SMITH HALL—First occupied in 1965, the building was expanded in 1976 to 223,285 square feet to house the departments of biology, chemistry, physics and science education. Included are plant growth chambers, greenhouses, reach-in environmental chambers, an aquarium room with aquatron, and controlled environmental animal rooms in addition to various classrooms and class laboratories. The Watson-King Planetarium is on the top floor.

BURDICK HALL—Completed in 1968, it houses the departments of nursing, occupational therapy, health sciences, and dance, and it contains facilities for intramural sports, an Olympic-sized swimming pool, classrooms, dance studios, three gymnasiums and various training and dressing rooms.

TOWSON CENTER—The 100-acre physical education complex houses the physical education and athletics departments and includes an arena, an all-weather track, 10 tennis courts with lighting, and separate fields for football, lacrosse, baseball, soccer, field hockey and softball. The building includes an arena with 165,000 square feet of floor space, six classrooms, a research laboratory, a curriculum center, student and faculty lounges, indoor archery and golf ranges, weight rooms, training areas and facilities, fencing, wrestling and gymnastic rooms, open teaching areas, five men's varsity locker rooms, four women's varsity locker rooms, four men's visiting team rooms, three women's visiting team rooms, six handball courts, four squash courts, two doubles squash courts, and a 60-foot long elevated press box.

LIDA LEE TALL—In addition to the Learning Resource Center for Grades K through 6, Lida Lee Tall also houses the Council Day Care Demonstration and Training Center, the Aliza Brandwine Center for Parent-Infant Development, the Student Day Care Center, and the offices of the Occupational Therapy Department.

ALBERT S. COOK LIBRARY—This modern five-story building was completed in 1969. It is designed to shelve 600,000 volumes and provides seating for 600 students. Towson's long history is reflected in the extensive collections of bound volumes, reference works, and substantial holdings on microfilm. The Academic Computing Center is located on the ground floor. The Department of Computer and Information Sciences offices are located on the fourth floor.

MEDIA CENTER—This building houses the offices of equipment circulation, information retrieval, television productions, cinematography by pro-

duction, graphics, film loan services, still photography and audio productions and electronic repairs, constituting one of the best equipped audiovisual centers in the state. The campus radio station, WCVT-FM, is located in this building.

FINE ARTS CENTER—A \$6.5-million building opened in 1973, houses the department of art, music and theatre arts, as well as a main stage theatre, a studio theatre, concert hall, the Holtzman Art Gallery and the Roberts Room, which displays the university's extensive Asian Art Collection.

HAWKINS HALL—Part of a three-building complex, it houses the elementary, secondary and early childhood education departments. Named for the former president, Earle T. Hawkins, it is equipped with large, attractive classrooms which can be sectioned into several smaller rooms. Television monitors are capable of recording activities in Lida Lee Tall. Also included in the wing is a reading center, testing modules, and an independent production area with learning carrels.

PSYCHOLOGY BUILDING—Part of the three-building complex that contains Hawkins Hall, it houses the psychology department, including learning laboratories, animal laboratories, statistics laboratories and an auditorium with learning cubicles.

LECTURE HALL—Part of the three-building complex that contains Hawkins Hall and the Psychology Building, it is equipped with broad space, a large electronic screen, and adjacent seminar rooms. Television cameras connect it with Hawkins Hall and the Psychology Building.

RESIDENCE HALLS

RESIDENCE TOWER—This high-rise residence hall houses 463 students. It includes lounge areas, classroom space, conference rooms and recreation areas.

NEWELL HALL—The first dormitory built on the university campus, housing 220 students, it has been renovated to an arrangement of double-loaded corridors to include small cluster living units. The units are self-contained to include small lounges, bathrooms and two or three student bedrooms. The building also includes the recently remodeled dining facilities, a recreation area, lounge and snack bar.

RICHMOND HALL—This is the second building erected for student housing and is adjacent to Newell Hall. Its arrangement is similar to that of Newell Hall, and it houses 122 students.

WARD AND WEST HALLS—Built in 1951, these twin residence halls were renovated in 1985. Air-conditioning was added to Ward Hall in 1986 and West Hall in 1987. The halls house both men and women, and each can accommodate about 57 students.

PRETTYMAN AND SCARBOROUGH HALLS—Built around a court garden, these twin residence halls, completed in 1956 and 1964, provide rooms for 164 students each.

THE GLEN RESIDENCE COMPLEX—A complex consisting of four (4) residence towers and a dining hall connected together by a landscaped patio/courtyard. A total of 1684 students, both male and female, can be housed in these modern motel style accommodations and can be served in the 640 seat dining facility overlooking "The Glen."

OTHER BUILDINGS

UNIVERSITY UNION—Completed in 1971, this \$5-million structure is designed with two fronts. The three-story structure houses food service facilities, placement office, academic advising and tutorial center, student lounge areas, meeting rooms, and varied recreational areas including bowling, billiards and electronic games. The campus box office, book store, post office and parking services are located there, as well as the offices of the Student Government Association, the student newspaper *Towerlight*, and the yearbook *Tower Echoes*. Conferences, as well as dinners, dances, and other social events are also held in the building.

ADMINISTRATION BUILDING—Completed in 1972, it houses the executive and administrative offices of the university in a three-story modern building.

DOWELL HALL—This building completed in 1962 houses Medical Treatment facilities on the lower floor consisting of treatment rooms, a 4-bed infirmary, and a whirlpool bath. The second floor is occupied by the Center for Orientation and Academic Advising.

GLEN ESK—Formerly the home of the president, it is now occupied by the Counseling Center, which provides counseling and psychological services.

GENERAL SERVICES BUILDING—These facilities opened in 1969 to consolidate the physical plant and other service operations. The building houses maintenance trade shops, the motor pool, headquarters for the police department, and central stores and receiving.

MINNEGAN STADIUM—Completed in time for the fall, 1979 football season, the stadium is the home of Towson's NCAA Division IAA Tigers. There is an outdoor track. Seating for 5,000 fans can be expanded to double that number.

Appendix C

ADMISSIONS POLICY

A. Undergraduate admission requirements established by the Board of Trustees of State Universities and Colleges:

Admission to the State universities/colleges shall be determined without regard to race, color, religion, national origin, or sex.

1. High School Graduates

- a. The Board requires, as a minimum admissions standard for all full-time and part-time entering freshmen who have graduated from high school within five years of admission, a high school average of "C" or better. However, the Board encourages each institution to adopt standards above the minimum level.
- b. Each institution will develop predictive measures of probable academic success and identify any additional admissions criteria. Admission shall be granted to high school graduates on the basis of grades, rank, admission test scores, and other such evidence, including the recommendations of appropriate high school officials, as may be deemed indicative of the ability of the applicant to complete a course of study in a university/college leading to a degree.
- c. No admission offer shall be made prior to receipt of a candidate's scores on the admission tests administered in the candidate's senior year or subsequent thereto, except in special circumstances as determined by the university/college. Early admission may be offered to not more than a maximum of twenty percent of the anticipated enrollment in the freshman class. Such an offer shall be made only to an applicant of demonstrated superior scholarship and promise, as evidenced by his or her record through the junior year and by his or her performance on the admission tests administered in his or her junior year or after.
- d. The tests to be used for admission considerations shall be the College Board Scholastic Aptitude Tests.
- e. In addition to those students admitted under a. and b. above, each institution may admit, up to 15% of its entering freshman class, students whose high school average was less than "C" but who show potential for success in postsecondary education. All students admitted under this program must be provided with appropriate academic and other support services.
- f. Admission prior to graduation from high school shall be conditional upon completion of the high school curriculum in a manner that would qualify the student for admission under paragraph 1.b., above.
- g. In the evaluation of academic credentials, no preference shall be granted as between residents of the State, upon the basis of their place of residence.
- h. Completion of a university/college preparatory curriculum as specified in paragraph 2.a. is required; however, high school graduates who have not followed a university/college preparatory curriculum, but whose grades, rank, and aptitude test scores indicate the potential to complete a university/college program, shall be admitted conditionally or have the requirement waived as specified in paragraphs 2.b. and 2.c.

- i. All entering freshmen with an SAT score of less than 470 on the respective sections of the SAT shall be administered diagnostic/placement tests in reading, writing, and mathematics, to determine their strengths and weaknesses.

- (1) All students earning below a predetermined standard on these examinations shall be required to participate in remedial programs designed to eliminate deficiencies in basic skills.

- (a) These students shall be administered post-tests to determine if they have reached the established standard.*

- (b) Students who fail to meet the standard within two semesters and a summer session shall not be retained at the institution.

- (2) Students who exhibit a weakness in the basic skills area but are not in need of full remedial programs shall be given a prescribed program to be completed prior to admission to junior status.

- (3) Students who earn above a predetermined score at the upper end of the scale; e.g., the 95th percentile, shall be encouraged and enabled to undertake a program commensurate with their measured abilities.

- j. Students, who have earned fewer than 25 credit hours and desire to transfer to a State university/college, shall be admitted under the conditions set down in paragraph 1.i. in accordance with the Maryland Student Transfer Policies, which require equal treatment of native and transfer students.

- k. Admission to some designated programs may require higher standards or be limited by the opportunities available to complete a clinical or other requirement of the major program.

- l. The institutional standards shall be approved by the Board and reviewed by them on an annual basis and such standards shall be published in each State university/college catalogue.

- m. The standards depicted above shall become effective with the entering class of Fall 1980.

2. High School Course Requirements

- a. Effective Fall 1984, entering freshmen will be required to have completed a prescribed high school curriculum consisting of four (4) units of English, three (3) units of social science, two (2) units of science and two (2) units of mathematics. One (1) additional unit of mathematics will be required in Fall 1988. The schedule for phasing in specific courses follows:

- (1) Fall 1984—one unit each of English Composition, U.S. History, American Government, and Algebra I.

- (2) Fall 1985—one unit in either American Literature or English Literature and one unit in laboratory-based Biology.

- (3) Fall 1986—one unit in American Literature and one unit in English Literature and one unit in Geometry.

- (4) Fall 1987—one unit each of World Civilization and a laboratory-based science course of the student's choice.

- (5) Fall 1988—one unit in Algebra II.

- (6) Fall 1991—one unit of a foreign language.

- (7) Fall 1992—two units of a foreign language.

In addition to the required courses, the Board believes that college-bound high school students would benefit from a background in oral communication, the fine arts, and computers.

- b. In any given year of the phased-in plan, a student who has not taken the required courses but whose past achievements indicate that he has potential to achieve satisfactorily in college, may be admitted to the university/college with the understanding that courses will be taken during the freshman year in the prerequisite deficient area(s). The students will not receive graduation credit for these courses.

- c. Students who demonstrate proficiencies in required courses, even though they have not earned credit in those courses, may have the conditional status waived. Verbal and Math SAT scores of 550 or above on respective sections of the SAT will serve as a waiver; i.e., a Math SAT of 550 will waive mathematics and science course requirements and a Verbal SAT of 550 for a waiver of English and social science course requirements. Other test scores comparable to the SAT scores may also be used to determine eligibility for waiver.

- d. Advanced placement enables gifted and certain other students to pursue advanced courses before high school and opt out of certain required courses in high school. In these cases the units may not appear on the high school transcript. If the advanced courses have been taken, one can assume that minimum requirements have been met. (Example—If trigonometry appears on the high school transcript it can reasonably be assumed that algebra I and II and geometry have been taken in an earlier grade.)

3. Non-graduates of High School

- a. Applicants who are not high school graduates shall be admitted on the basis of high school equivalence examinations, the admissions test scores, and such other evidence, including the recommendations of appropriate persons, as may be deemed indicative of the ability of the applicant to complete a course of study in a university/college leading to a degree.
- b. Applicants with GED subtest scores less than 50 in English composition, social studies, natural sciences and literature (reading) and with a subtest score less than 60 in mathematics will be admitted conditionally.
- c. Students with subtest score(s) below the minimum will be required to satisfactorily complete course(s) in the deficient subject area(s) before the conditional status is removed.
- d. Courses in deficient areas are not creditable toward graduation; therefore, enrollment in courses in the discipline of subject deficiency is prohibited until the deficiency is removed.

4. Out-of-State and Foreign Students

A maximum of fifteen percent of the total undergraduate full-time day students at each university/college may be composed of out-of-state students and foreign students not residents of Maryland. However, the university/college shall be expected to meet its obligations to qualified resident students before approaching the maximum enrollment of out-of-state and non-resident foreign students.

5. Student Residency Classifications for Tuition Purposes

- a. *General.* To qualify as a resident for tuition purposes for any given semester, the applicable individual must have maintained his or her domicile in Maryland for at least six (6) months immediately prior to the last date available for initial registration for that semester at the State university/college which the student attends. If a student is not financially dependent on his or her parent and/or spouse, the domicile of the student shall control. If a student is financially dependent on his or her parent and/or spouse, then the domicile of the parent or spouse shall control.
- b. *"Financially dependent" defined.* A "financially dependent" student is one who receives more than one half of his or her support from a parent or spouse during the six-month period immediately prior to the last date available for initial registration for the semester in question. If a student receives more than one half of his or her support in the aggregate from both a parent and spouse, the student shall be considered financially dependent on the person providing the greater amount of support. Until proven otherwise, it shall be presumed that a person is financially dependent on a parent and/or spouse.
- c. *"Parent" defined.* The word "parent" includes a natural parent, an adoptive parent, a stepparent, a legally appointed guardian, and a person who stands *in loco parentis* to the student when he has put himself in the situation of a lawful parent by assuming parental obligations without legally adopting the student. The determination of such status will be made on a case by case basis by the responsible university/college official who will consider who has custody or control of the student, who has assumed general responsibility for his or her welfare.

d. Domicile

- (1) *Establishment of domicile.* The term "domicile" shall be synonymous with the term "residence." Domicile is a person's permanent place of abode; namely, there must be established in Maryland for a purpose independent of attendance at a State university/college.
- (2) *Maintenance/change of domicile.* For the purpose of residency for tuition purposes, only one domicile may be maintained.
 - (a) A domicile in Maryland is lost when a new one is established elsewhere, or if an individual leaves the State with no intent to return to Maryland. After residing elsewhere for six months, regardless of intent to return, a student's status as a resident for tuition purposes is in question.
 - (b) The domicile of the applicable person shall be determined at the time of initial registration of the student but may hereafter be changed for any subsequent semester if circumstances change in relation to these regulations.
- (3) *Criteria for determining domicile.* The following criteria shall be considered by the State university/college in determining the domicile of a student who is not financially dependent.
 - (a) Ownership or rental of living quarters in Maryland other than property owned, managed or supervised by the State college, such as dormitories, fraternity houses, or sorority houses.
 - (b) Substantially uninterrupted physical presence in Maryland, including the months when the student is not attending the State university/college.
 - (c) Maintenance in Maryland of all, or substantially all, of the student's possessions.
 - (d) Payment of Maryland State income taxes on all income earned, including all income earned outside the State.
 - (e) Registration to vote and actually having voted in the State if an election has been held subsequent to registration to vote.
 - (f) Registration of a motor vehicle in the State, if the student owns or uses such a vehicle.
 - (g) Possession of a valid Maryland license if the student is licensed to drive anywhere.
 - (h) Any other relevant facts.
- (4) *Full-Time Members of the Armed Forces of the United States and Their Spouses and Dependents.*
 - (a) A full-time member of the Armed Forces of the United States residing in Maryland shall be granted in-state status, for tuition purposes, except as provided for in (b) below.
 - (b) A full-time member of the Armed Forces of the United States sent by a branch of the Armed Forces to attend a State university/college for the purpose of completing a degree shall not be granted in-state status for tuition purposes.
 - (c) Spouses of full-time members of the Armed Forces of the United States residing in Maryland shall be granted in-state status, for tuition purposes.
 - (d) "Financially Dependent" children of members of the Armed Forces of the United States (as the term "financial dependent" is defined in Paragraph 4.b. of this section) shall be granted in-state status, for tuition purposes.
- (5) *Foreign Nationals.* The domicile requirements set forth in these Regulations shall apply to immigrant aliens lawfully admitted for permanent residence in accordance with the laws of the United States.
- (6) *Responsibility of Students.*
 - (a) Any student or prospective student in doubt concerning his/her residence status is responsible for receiving a ruling from the designated official at the applicable State university/college.
 - (b) A student whose status is altered from resident to nonresident, or vice versa, because of the change of domicile of the student, parent or spouse as applicable, has the re-

sponsibility of informing the designated official at the applicable State university/college.

- (c) The residency status of a student may be altered by the applicable State university/college on the basis of its own findings.
- (d) A change in tuition status must be requested by a student prior to the registration period in order to be effective for that semester.
- (e) A student applying for a change to Maryland resident tuition status must furnish under oath a statement fully disclosing his income and assets, to include parental or spousal income tax data, and must furnish any further documentation deemed necessary by the institution.
- (f) The burden of proof shall be upon the student to establish residence in Maryland by clear and convincing evidence.
- (7) *Responsibility of each State university/college.*
 - (a) If a timely request for reclassification is made by the student and if the State university/college has not rendered a final decision prior to the commencement of the applicable semester, the student shall pay fees and charges associated with his contemporary residency status; and if the status is changed, any excess fees or charges shall be refunded.
 - (b) Each state university/college shall establish an appeals procedure which will be assumed to work from written documents rather than by way of formal hearings. An appeals committee decision may be appealed further to the chief administrative officer of the institution or to his designee.
- (8) *Interpretation of Rules.* These rules shall not be interpreted as establishing any irrefutable presumptions of fact.
- 6. *Advanced Undergraduate Standing.*
 - a. An applicant for advanced undergraduate standing must present a transcript and record showing that he left in good standing from the last college or university he attended. Such college or university shall be regionally accredited or accredited by the Maryland State Board of Education.
 - b. Credit shall be allowed for all courses that approximate the requirements of the particular university/college, or, if not offered at the university/college, are approved by the appropriate department of the university/college, or, in the absence of an appropriate department, by the Curriculum Committee of the university/college. In no case shall transfer credit be allowed for courses in which the applicant has earned an "F" grade.
 - c. In all cases, the transfer applicant must earn at least thirty credit hours toward his degree at the university/college as a full-time or part-time student.
 - d. Exemptions from the above requirements may be granted on an individual basis by the president of the university/college, except that in no case shall transfer credit be allowed for courses in which the applicant has earned an "F" grade.

7. *Maryland State Board for Higher Education Transfer Policies*

Preamble

The major objective of these policies is to relate in operational ways the undergraduate programs offered at the public sector of higher education in Maryland. These policies aim at equal treatment of native and transfer students. The effectiveness of these policies, since their promulgation in December 1972, has been confirmed by the minimal loss of credits experienced by students transferring within the public sector, by the apparent satisfaction of these students, and by the absence of appeals concerning the transferring of credits.

The intended principal benefactor is the student, who is best served by current information about programs and protected by firm arrangements among the public segments of higher education in Maryland which permit him to plan a total degree program from the outset. With successful academic performance, he or she can make uninterrupted progress even though transfer is involved. The measures of the effectiveness of the plan is maximum transferability of college level credits within the parameters of this agreement. Essentially, transfer and native students are to be governed by the same academic rules and regulations.

In a complementary way the State's interests are served by having its

higher education resources used optimally by reducing the time taken to complete a degree through the avoidance of repeated class experience.

The institutional interests are protected also by the systematic approach; institutions are relieved of the uncertainties of unplanned articulation without becoming production line enterprises.

The dynamics of higher education preclude once-and-for-all time curricular and perpetual grading and retention systems. However, within the general structure of this plan there is opportunity for continual updating of the details.

In more specific ways this document's purpose is (1) to specific areas of agreement among the public two-year and four-year institutions of higher education pertaining to facilitating the transfer of students within these segments; (2) to provide for a continuous evaluation and review of programs, policies, procedures, and relationships affecting transfer of students; (3) to recommend such revisions as are needed to promote the academic success and general well-being of the transfer student; and (4) to provide a system for appeals.

Policies

- a. Public four-year colleges and universities shall require attainment of an overall 2.00 average on a four-point scale by Maryland resident transfer students as one standard for admission. If the student has attended two or more institutions, the overall 2.00 will be computed on grades received in courses earned at all institutions attended unless the student presents an Associate in Arts degree.
 - (1) Each public institution of higher education shall designate a person responsible for coordinating transferability to assist in accomplishing the policies and procedures outlined in this plan. The State Board for Higher Education will support requests by a public institution of higher education to establish the position of transfer coordinator.
 - (2) Efforts shall be intensified among the sending institutions, based on shared information, to counsel students on the basis of their likelihood of success in various programs and at various institutions. (See par. 1(c) and par. 9).
 - (3) Procedures for reporting the progress of students who transfer within the State shall be developed as one means of improving the counseling of prospective transfer students.
- b. Admissions requirements and curriculum prerequisites shall be stated explicitly in institutional publications. Students who enroll at Maryland Community Colleges shall be encouraged to complete the Associate in Arts degree or to complete 56 hours in a planned sequence of courses which relate to general education and the selection of a major before transfer. Subsequent graduation from the receiving four-year institution is not assured within a two-year period of full-time study.
 - (1) Students from Maryland Community Colleges who were admissible to the four-year institution as high school seniors and who have attained an overall 2.00 average in college and university parallel courses shall be eligible for transfer at any time, regardless of the number of credits. Those students who have been awarded the Associate in Arts degree or who have successfully completed 56 hours of credit with an overall 2.00 average, in either case in college and university parallel courses, shall not be denied transfer to an institution. If the number of students desiring admission exceeds the number that can be accommodated in a particular professional or specialized program or certain circumstances exist which require a limitation being placed on the size of an upper division program or on the total enrollment, admission will be on criteria developed and published by the receiving institution, which provides equal treatment for native and transfer students.
 - (2) Course semester hour requirements which students must meet in order to transfer with upper division standing shall be clearly stated by the receiving institution.
 - (3) The establishment of articulated programs is required in professional and specialized curricular.
- c. Information about transfer students who are capable of honors work or independent study shall be transmitted to the receiving institution.

- d. Transfer students from newly established public colleges which are functioning with the approval of the State Board for Higher Education shall be admitted on the same basis as applicants from regionally accredited colleges.
- e. (1) Credit earned at any other public institution in Maryland shall be transferable to any other public institution provided:
 1. the credit is from a college or university parallel program;
 2. the grades in the block of courses transferred average 2.00 or higher; and
 3. the acceptance of the credit is consistent with the policies of the receiving institution governing students following the same program.
- (2) Credit for the CLEP general examinations will be considered for transfer only for scores at the 50th percentile, and above, of the combined national men-women sophomore norms. The exact number of credits awarded, if any, in transfer will be determined by the same regulations that pertain to native students in the receiving institution. The percentile needed to transfer credit for the CLEP subject examination will be determined by the receiving institution. Segmental/Institutional governing boards shall submit to the State Board for Higher Education by December 1st of each year data collected from the institutions concerning the credit given, minimum scores and equivalent courses for the CLEP subject examination. This data will be distributed annually by the State Board for Higher Education to transfer advisors at all institutions. In order to facilitate the transfer of Advanced Placement and CLEP credit, the achievement score for Advanced Placement and the scaled score, percentile rank and the type of examinations (General or Subject) for the CLEP shall be reported on the transcript when credit is awarded.
- (3) The Associate in Arts degree shall serve the equivalent of the lower division general education requirements at the receiving institution where the total number of credits required in the general education program in the sending institution is equal to or more than that required in the receiving institution and where the credits are distributed among the arts and sciences disciplines.
- (4) The determination of the major program requirements for a baccalaureate degree, including courses in the major taken in the lower division shall be the responsibility of the institution awarding the degree.
- f. Transfer of credits from the following areas shall be consistent with the State minimum standards, and shall be evaluated by the receiving institution on a course-by-course basis:
 - (a) Courses from technical (career) programs.
 - (b) Orientation courses.
 - (c) Remedial courses.
 - (d) Courses credited by a university or college which has no direct academic and administrative control over the students or the faculty involved in the courses.
 - (e) Credit for work experience.
- g. Credit earned in or transferred from a community college shall normally be limited to approximately half the baccalaureate degree program requirement, but in no case more than 70 credits, and to the first two years of the undergraduate educational experience.
- h. Transfer students shall be given the option of satisfying graduation requirements which were in effect at the receiving institution at the time they enrolled as freshmen at the sending institution, subject to conditions or qualifications which apply to native students.
- i. Institutions shall notify each other as soon as possible of impending curricular changes which may affect transferring students. When a change is made by one institution necessitates some type of change at another institution, sufficient lead time shall be provided to effect the change with minimum disruption.
- j. Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.
- k. The Segmental Advisory Committee shall continue to review articulation issues and shall recommend policy changes as needed to the State Board for Higher Education.
- l. In the event a transfer student believes he or she has not been accorded the consideration presented in this policy statement, the student shall have the opportunity to have the situation explained or reconciled.

Initially, differences of the interpretation regarding the award of transfer credit shall be resolved between the student and the institution to which he or she is transferring. If a difference remains unresolved, the student shall present his or her evaluation of the situation to the institution from which the student is transferring. Representatives from the two institutions shall then have the opportunity to resolve the differences.

The sending institution has the right to present an unresolved case to the Segmental Advisory Committee through a written appeal to the State Board for Higher Education. The SAC shall receive relevant documentation, opinions and interpretations in written form from the sending and receiving institutions and from the student. The Segmental Advisory Committee will send the written documentation to a pre-established articulation committee, which, after review, will submit its recommendations to the Segmental Advisory Committee.

Copies of the recommendations shall be forwarded by the State Board for Higher Education to the segments for distribution to the appropriate institutions.

A complaint on transfer status must be initiated by the student within one calendar year of his or her enrollment in the receiving institution.
- m. *Transfer of Credits from Accredited and Non-Accredited Postsecondary Institutions.*
 1. Courses from institutions with regional accreditation normally shall be accepted by each State university/college.
 2. Courses from institutions without regional accreditation normally shall be considered for acceptance by a State university/college only after the person requesting the transfer of such credits has successfully completed two semesters or twenty-four (24) credits at the State university/college and has maintained at least a "C" (2.00) average in these courses. When considering credits for transfer, the State university/college shall accept only those which parallel its own courses and which have been completed with a "C" (2.00) or better. In addition, each State university/college may, at its discretion, adopt further requirements for the transfer of such credits and will notify the Board of any such additional requirements.
- n. *Advanced Placement and Advanced Credit.*
 1. If a student desires advanced credits or advanced placement, he or she shall take either the Advanced Placement Tests of the College Entrance Examination Board or an equivalent type examination as determined by the university/college.
 2. Each university/college shall determine the limitations on the number of advanced credit hours which any student may earn.

B. T.S.U. Applicant Character Policy

The Admissions Committee, in conjunction with and through the Director of Admissions, reserves the right to refuse, deny, or revoke application for the admission or readmission of any applicant whose former record(s) and/or observed conduct is deemed incongruent with established guidelines of student demeanor and academic responsibility at Towson State University.

Appendix D

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act of 1974 is a Federal Law which provides that the institution must maintain the confidentiality of student education records. This law states (a) that a written institutional policy must be established and (b) that a statement of adopted procedures covering the privacy rights of students be made available. The University has taken the appropriate steps to comply with this law.

Towson State University accords all the rights under the law to students who have reached the age of majority. Information may be released to parents who have established the students' dependency as defined by the Internal Revenue Code of 1954, Section 152. The Judicial Affairs office will review the parent's claim of dependency and notify the student of the claim prior to release of any academic information. Except as permitted under the act, no one outside the institution shall have access to any information from the students' education records without the written consent of students. Those people permitted access under the Act include personnel within the institution, officials of other institutions in which students seek to enroll, persons or organizations providing financial aid, accrediting agencies, persons in compliance with a judicial order and persons in an emergency acting in order to protect the health or safety of others.

Within the Towson State University community, only those individuals acting in the students' educational interest are allowed access to student education records. This includes personnel in the offices of the Registrar, Comptroller, Financial Aid, and other academic personnel within the limitations of their need to know. The Registrar may grant access to educational records for other legitimate reasons permitted under the Act.

The University may provide Directory Information in accordance with the provisions of the Act without the written consent of the student. Directory information includes: student name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees and awards received, the most recent previous educational institution attended by the student, participation in officially recognized activities and sports, and the weight and height of members of athletic teams. The Registrar's Office will release Directory Information at its discretion and may release Directory Information over the telephone or in writing. Students may withhold Directory Information by notifying the Registrar in writing within two weeks after the first day of class.

A request for non-disclosure will be honored for only one academic year; therefore, authorization to withhold Directory Information must be filed annually with the Registrar.

The law provides students with the right to inspect and review information contained in their education records. The Registrar at Towson State University has been designated to coordinate the inspection and review of student education records. These records include admissions, personal, academic and financial files. Students wishing to review their education records must make written requests to the Registrar. Records covered by the Act will be made available within thirty days of the request. Students may have copies made of their records with certain exceptions (e.g., a copy of the original or source document which exists elsewhere) or when student has an outstanding financial obligation to the university. These copies would be made at the students' expense. Education records do not necessarily include records of instructional, administrative, and educational personnel which are the sole possession of the maker. Health records will not be released to the students, but may be reviewed by physicians of the students' choosing.

As stated in the Act, students may not inspect and review the following: financial information submitted by their parents, confidential letters and recommendations associated with admissions, employment or job placement or honors to which they have waived their rights of inspection and review. Educational records containing information about more than one student are restricted and the institution will permit access only to that part of the record which pertains to the student. The institution will not permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975.

The university has established an appeal mechanism in accordance with the Act. Students who believe that their education records contain information that is inaccurate or misleading, or unlawful may discuss their problems informally with the Registrar. The Registrar may agree to the request and the appropriate records will be amended. If not, the students will be notified that the records will not be amended; and they will be informed by the Registrar of their right to a formal hearing. requests for formal hearings must be made in writing to the Vice President for Academic Affairs. The Vice President will inform students of the date, place, and time of the hearing. Students may present evidence and may be assisted or represented at the hearings by counsel. The hearing panels which will adjudicate such challenges will be comprised of the Vice President for Academic Affairs, the Vice President for Student Affairs, the Graduate Dean, and the Academic Dean of the student's college. Decisions of the hearing panels will be final. The findings will be based solely on the evidence presented at the hearing, and will consist of written statements summarizing the evidence and stating the reasons for the decisions, and

will be delivered to all parties concerned. The education records will be corrected or amended in accordance with the decisions of the hearing panels. Students dissatisfied with the outcome of their hearing may prepare a written statement which will be placed in the education records and maintained as part of the students' records.

Those students who believe that the adjudications of the challenges were unfair, or not in keeping with the provisions of the act may request that the hearing be reviewed by the President of the University. In addition, students who believe that their rights have been abridged, may file complaints, with The Family Educational Rights and Privacy Act Office (FERPA), Department of Health, Education and Welfare, Washington, D.C. 20201, concerning the alleged failures of Towson State University to comply with the Act. Revisions and clarifications will be published as experience with the law and institution's policy warrants.

Appendix E

STATEMENT OF POLICY OF SATISFACTORY PROGRESS FOR PURPOSES OF RECEIVING FINANCIAL AID

I. Introduction

Federal regulations require that institutions of higher education establish minimum standards of "satisfactory progress" for students receiving financial aid. Towson State University makes these standards applicable to institutionally awarded funds, the Guaranteed Students Loans (GSL/FISL), and Supplemental Loans for student and loans for parent, Pell grants and State Scholarship Funds.

Students Accepted as Degree Candidates—Graduate or Undergraduate

Any student accepted as a degree candidate and planning to register for the first time is considered to be making initial satisfactory academic progress and can be evaluated for financial aid. Note: Some programs may require a student to register for 12 or more credits in order to qualify for specific aid programs.

II. Returning full-time Undergraduate degree students

During any semester in which a student attempts 12 or more credits that student must complete at least 12 credit hours.

Repeated courses will not be calculated in the total number of hours completed.

SATISFACTORY PROGRESS—FULL-TIME STUDENTS

Required minimum cumulative GPA and credits to be completed annually for satisfactory academic progress for purposes of financial aid:

No. of Semesters Completed	Minimum Credits	Minimum GPA
2	24	1.50
4	48	1.80
6	72	2.00
8	96	2.00
10	120 or more	2.00

III. Returning Part-Time Undergraduate Students

During any semester in which a student registers for less than 12 credits per semester, that student must complete six credit hours.

SATISFACTORY PROGRESS—PART-TIME STUDENTS

Required minimum cumulative GPA and credits to be completed annually for satisfactory academic progress for purposes of financial aid:

No. of Semesters Completed	Minimum Credits Completed	Minimum GPA
2	12	1.10
4	24	1.50
6	36	1.65
8	48	1.80
10	60	2.00
12	72	2.00
14	84	2.00
16	96	2.00
18	108	2.00
20	120	2.00

Students may not receive need-based financial aid unless they are degree candidates. Every completed semester of attendance at Towson State University is reviewed for Satisfactory Academic Progress, including semesters attended as a special non-matriculated student and semesters attended on a less than half time basis. Transfer credits do not count when measuring satisfactory academic progress for purposes of receiving financial aid at Towson State University.

IV. Returning Graduate Degree Candidates

A graduate degree candidate must maintain a cumulative GPA a 3.00 *and complete* a minimum of 6 credits a semester.

Required minimum cumulative GPA and percentage of coursework completed to be considered making satisfactory academic progress for purposes of financial aid:

No. of Semesters Completed	Minimum Percentage of Work Completed	Minimum GPA
2	14%	3.00
4	28%	3.00
6	42%	3.00
8	57%	3.00
10	71%	3.00
12	86%	3.00
14	100%	3.00

V. Additional Provisions for Maintaining Financial Aid Eligibility

Credits completed during minimester of Summer session are counted into the total credits completed but these periods do not count as semesters. Credits earned with the following grades cannot be considered credits completed in the calculation of determining academic progress:

1. Audit – "U"
2. Withdraw – "W"
3. Incomplete – "I"★
4. Unsatisfactory – "U"
5. Failure "F" or "FX"

Academic dismissal or disciplinary suspension from the University will result in automatic termination of financial aid. Students withdrawing from

the University will be evaluated under the provisions of existing university refund policy.

- * except for "I" grades routinely awarded for a maximum of 2 semester for clinical or practicum work in certain majors.

VI. Appeals

A. If a student's financial aid is withdrawn for failure to maintain satisfactory academic progress, the student may appeal. This appeal must be submitted to the Director of Financial Aid in writing within ten days of notification and must explain the extenuating circumstances which would warrant the reconsideration of the student's record. The Financial Aid Committee will then review the appeal and determine whether or not restoration of eligibility is justified. The student will receive written notice of this decision.

B. Restoration of Eligibility

1. If the Financial Aid Committee approves a student's appeal, that student's eligibility will be restored and he or she will be re-evaluated for need.
2. A student who lost eligibility for Financial Aid may reapply provided he or she
 - a. is a degree candidate
 - b. has re-established the minimum cumulative GPA
 - c. has attained the minimum credit hours required
 - d. has not exceeded maximum time limitations.

Appendix F

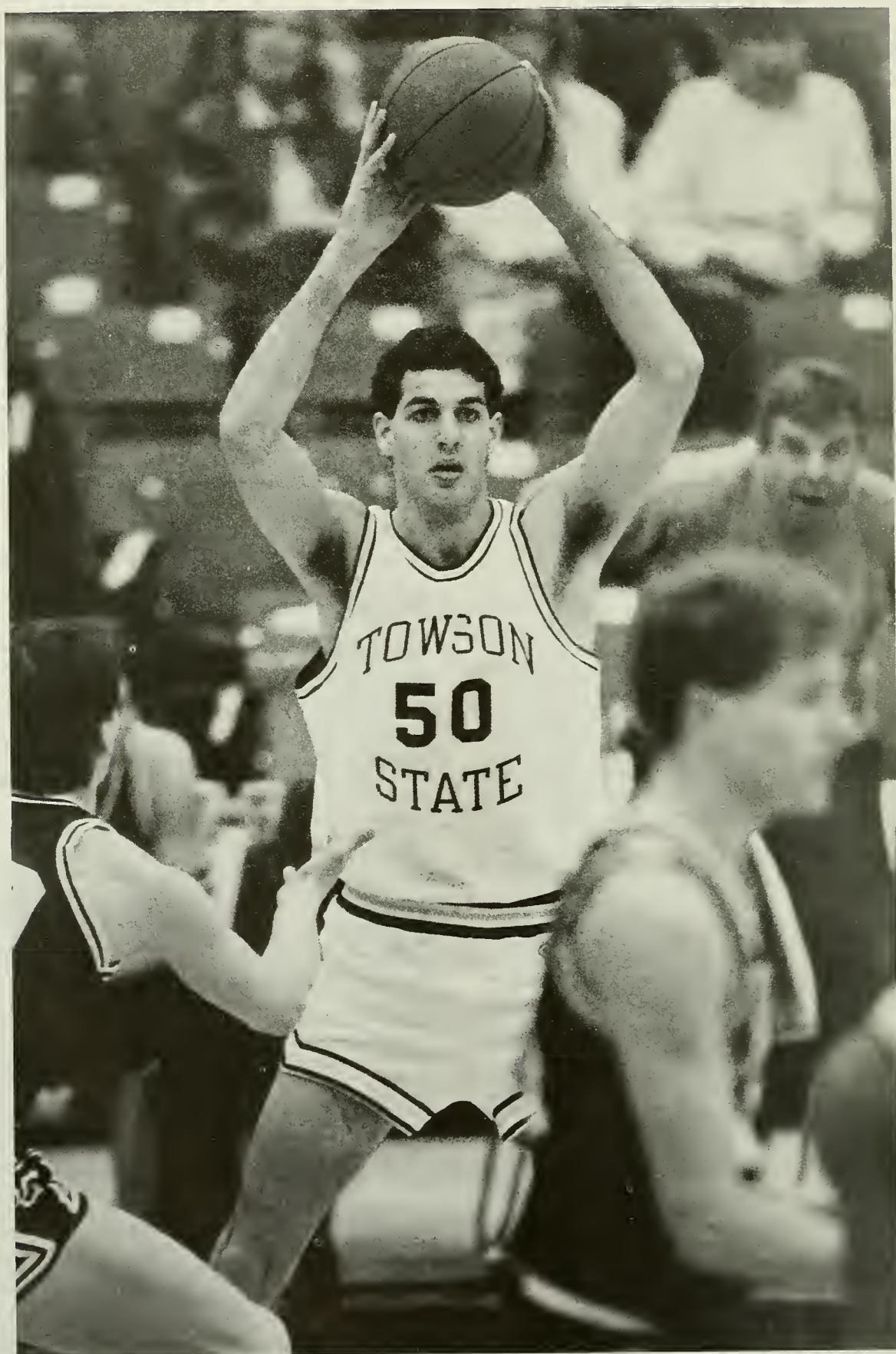
GUIDELINES ON USE OF PRAYER OR OTHER RELIGIOUS ACTIVITIES

Application

These guidelines affect the university, university-sponsored events, and non-religious organizations affiliated with Towson State University. This policy does not affect recognized student religious organizations and activities.

Policy

In keeping with these laws and regulations, Towson State University does not encourage official use of prayer or other religious practices at university events and events sponsored by secular organizations affiliated with the university. Should an organization feel that prayer or other religious practice is an essential part of an event, the prayer or other religious practice should be strictly non-sectarian. Questions regarding this policy, or the appropriateness of a prayer or practice, or the wording of a particular prayer may be referred to the Office of the President.



A

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8:30 a.m. to 4:30 p.m.
Monday through Friday

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